UNIVERSITY OF NAIROBI

DEPARTMENT OF SOCIOLOGY AND SOCIAL WORKS

ACCESS AND UTILIZATION OF ICT FOR DELIVERY OF SEXUAL AND REPRODUCTIVE HEALTH SERVICES TO WOMEN WITH DISABILITIES IN NAIROBI CITY COUNTY

BY

BERYL AUMA ONDITI

C50/85689/2016

RESEARCH PROJECT

A Research Project Submitted in Partial Fulfilment of the Requirements for the Award of the Degree of Master of Arts in Sociology (Rural Sociology and Community Development), University of Nairobi

2019

DECLARATION

I, Beryl Auma Onditi, declare that this research project is my original work and has not been submitted to any academic institution, college or university.

Signature: ..... Date: .....

Beryl Auma Onditi

Registration Number: C50/85689/2016

This research project has been submitted for examination with my approval as the university supervisor.

Signature: ..... Date……....

Prof. Edward K. Mburugu,

DEDICATION

To my dear parents Mr. Kepher Onditi and Mrs. Mary Onditi and my brothers Victor Onditi and Allan Onditi as well as to my sisters Diana Onditi, Emma Onditi and Dr. June Onditi.

ACKNOWLEDGEMENTS

My greatest gratitude goes to the Almighty God for granting me the good health and resilience which amply pulled me through the rough terrain of research. I'm greatly indebted to my supervisor Professor Edward K. Mburugu for his unrelenting scholarly guidance and moral support since initial stages of drafting this project paper. It is this commitment that made the completion of this paper a success. I further acknowledge the entire teaching staff at the University of Nairobi, Department of Sociology and Social Work for the knowledge imparted during my course work making this project successful, I am forever grateful. My heartfelt appreciation is also extended to my dear parents Mr. Kepher Onditi and Mrs. Mary Onditi and my brothers Victor Onditi and Allan Onditi as well as to my sisters Diana Onditi, Emma Onditi and Dr. June Onditi. It is the love, motivation and positive criticism of these exceptional family members that kept me on toes to finish my paper. This research project could also have not been successful without the support of many friends both at the University of Nairobi and at my workplace and beyond. However, I only mention by names a few who played critical roles both directly and indirectly towards completion of this research and these are: Sally, Vivian, Moses and Lars. I am also grateful to respondents, focused group participants and key informants who willingly accepted to provide information without which this study would have been unsuccessful.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ACRONYMS

Able-App	-	Able-Application
CBM	-	Christoffel Blinden Mission
CEDAW	-	Convention on Elimination of Discrimination against Women
FIDA	-	Federation of Women Lawyers in Kenya
HIV & AIDS	-	Human Immunodeficiency Virus & Acquired Immune Deficiency Syndrome
ICPD	-	International Conference on Population and Development
ICT	-	Information, Communication and Technology
ICT4 SRHR	-	Information, Communication and Technology for Sexual and Reproductive Health Rights
ICTD	-	Information, Communication and Technological Development
KNSPWD	-	Kenya National Survey for Persons with Disabilities
MDGs	-	Millennium Development Goals
NCAPD	-	National Coordinating Agency for Population & Development
NCPWD	-	National Council for Persons with Disabilities
PWD	-	Persons with Disabilities
SDGs	-	Sustainable Development Goals
SMS	-	Short Message Service
SRH`	-	Sexual and Reproductive Health
UDPK	-	United Disabled Persons of Kenya
UN	-	United Nations
UNCRPD	-	United Nations Convention on the Rights of Persons with
UNFPA	-	United Nations Population Fund
UPIAS	-	Union of the Physically Impaired against Segregation
WHO	-	World Health Organization
WRC	-	Women Refugee Commission
WWD	-	Women with Disabilities

ABSTRACT

The passing of the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) was a momentous milestone in the lives of persons with disabilities. Member states involved ratified and promised to enhance inclusion of persons with disabilities. However, this has not been easily adhered to. Utilization of Information Communication and Technology (ICT) to champion similar agenda has been noted to have gained momentum across nations but developing nations are still struggling with low rates of ICT use in the push for service delivery on Sexual and Reproductive Health (SRH) for and among women with disabilities. The situation is not different in Kenya. Thus this study was conducted with the general intention of understanding the utilization of ICT in delivery of sexual and reproductive health services to women with disabilities in Nairobi City County. This county was selected because women with disabilities residing within it are positioned such that they can quickly embrace technology compared to their peers in the rural areas and other urban centers. The specific objectives of the study were: to examine the nature of reproductive health needs of women with disabilities in Nairobi City County; to examine the appropriate ICT characteristics in delivery of sexual and reproductive health services to women with disabilities; to establish the utility of ICT in delivery of sexual and reproductive health services to women with disabilities in Nairobi City County and assessing overall impact of ICT in facilitating access to reproductive health services amongst women with disabilities. Questionnaires comprising both open and closed ended questions was used, the researcher collected primary data from 75 women with disabilities across the 17 sub-counties of Nairobi City County. Purposive sampling of 75 respondents was done in this study. Complimentary data was also collected from three focus group discussion involving 8 participants. In addition, data was gathered from key informant interviews. Descriptive analysis was employed for the data and presented through frequency tables using head counts and percentages. The results revealed high levels of SRH services awareness among women with disabilities. Access to various SRH services was also noted to be high. The findings also indicated that use of ICT in delivering SRH services is important as evidenced by high adoption rate. More so, such ICT devices used were required to be easily available; affordable, accessible, acceptable and of high quality. Finally, the results revealed high positive impact of ICT aiding access to sexual and reproductive services on the part of women with disabilities. For the researchers' recommendation in view of the findings, SRH services should not only be available but affordable and of quality but it will be all inclusive for women with disabilities thus vital for the development process.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Utilizing Information, Communication and Technology (ICT) has been embraced in the 21st century as a way of reaching to remote and hard to reach populations. ICT is also acknowledged to be efficient and effective in delivery of services such as health, education and finance. Breakthrough which target the health sector such as Changamka targeting maternal health, m-Tiba as a micro insurance and m-Dawa an app for delivery of drugs are examples of ICT utilization in the health sector. It is expected that information on reproductive and sexual services are also delivered through the utilization of ICT. It was important to examine a population specific segment that faces discrimination or less prioritization to explore the impact of ICT on reproductive health, a reason to delve into the research on utilization of ICT for service delivery for reproductive and sexual health services to women with disabilities (WWD).

The major milestone achieved by the utilization of ICT in many fields is in its ability to tailor delivery of services based on needs. This is vital when addressing access to reproductive health services among persons with disabilities. National Coordinating Agency for Population and Development, (NCAPD, 2009) are cognizant of the difficulties faced by women for instance in accessing reproductive health services.

NCAPD (2009) questioned ways by which persons with impaired vision, physical mobility, mental capacity or speech related issues access reproductive health. Information on issues such as family planning, sexuality, access to pre-natal health services and gynecology are not just tailored to persons with disabilities under the conventional health system; a reason for the need to utilize ICT to facilitate reproductive health service delivery. The conventional reproductive health services are neither friendly (NCAPD, 2009) nor accessible.

Kenya National Survey for Persons with Disabilities (KNSPWD, 2008) pointing to two-thirds of WWD lacking access to reproductive health services. Limited attention is also given to reproductive health of PWD. This calls for the need to examine alternative ways of reproductive and sexual service delivery to women with disabilities.

States have embraced the human rights normative framework and ratified a variety of international conventions that include the Convention on the Elimination of Discrimination against Women (CEDAW) and the Convention on the Rights of Persons with Disabilities (CRPD). However, it is notable that progress has not been made in all the areas as some areas have been left behind with little progress being recorded. For instance, little has been achieved in sexual and reproductive rights (Frohmader & Ortoleva, 2013).

Christoffel Blinden Mission (CBM 2015), argued that persons with disabilities are faced with barriers in the process of accessing quality healthcare. These barriers have a gender dimension with women and girls with disabilities undergoing major difficulties in accessing sexual and reproductive health services. The Millennium Development Goals (MDGs) that morphed into Sustainable Development Goals (SDGs) addressed structural inequalities and discrimination that reinforce gender inequality. The SDGs further acknowledge that there is a general lack of access to reproductive health and sexual rights (CBM, 2015). The report notes that WWD are being left out of development process as they are discriminated upon in terms of sexual health and reproductive rights. This prejudice has negatively impacted them as they are denied access to information and services (CBM**,** 2015).

Women with disabilities demonstrated being highly affected in the reproductive health sector. Persons with disabilities experience higher rates of health risk behaviors. This may include smoking, drug and alcohol abuse among other health risk behaviors. More so, they have greater exposure to risks of violence and sexual abuse. This makes persons with disabilities,

particularly women with intellectual disabilities prone to sexual and reproductive abuse. Also, WWD are side-lined when it comes to receiving education on reproductive health rights. This fact makes it important to make sexual and reproductive health services a crucial issue for consideration (Banks & Polack, 2014).

The World Health Organization (WHO, 2011) approximated that 15% of the world population are persons with disabilities. Women Refugee Commission (WRC, 2015), points to emerging literature which is cognizant of the historic denial of access to reproductive health services to persons with disabilities especially services pertaining to sexual and reproductive health. Even where access to the information is enhanced, the information is inadequate.

Obtaining information on sexual and reproductive health is important in promoting healthy and safe relationships, HIV/AIDS and STIs' protection and overall in promoting family planning (WRC, 2015). The designers behind the "ABLE-App recognizes the plight of persons with disabilities especially in obtaining information regarding sexual and reproductive wellbeing (WHO, 2016).

International Conference on Population and Development (ICPD) delineates "persons with disabilities" as any form of impairment which may be physical, intellectual or mental and limit the participation of such individuals in the society (ICPD, 2012). This shows that persons with disabilities, especially women, have special needs that should be met to ensure their full participation and potential. Inclusive development is paramount to the general welfare of the society and key in fostering growth and economic development. Proper family planning policies, increasing health outcomes especially reduction of STIs and HIV/AIDS will depend greatly on addressing gaps in sexual and reproductive health (Omondi, 2015).

Communication Authority of Kenya reports the country recording mobile phone penetration of about 87% during the period of July to September of the year 2016. In particular mobile

penetration between July and September 2016 averaged at 38.5 million Kenyans out of a population of about 44 million had mobile phone subscriptions (Kuo, 2017). This mobile penetration level had risen to 40 million Kenyans by 2017. Moreover, the rate of smartphone penetration recorded in Kenya during the first quarter of the year 2018 was about 90.4% of the adult penetration (Ngunjiri, 2018).

It is further noted that as at March 2018, Kenya was the leading globally in share of internet traffic (83%). This suggests that mobile phone and internet use can be embraced as a major part of the ICT to reach to persons with disabilities. Mobile phones and with proper internet usage can be utilized in giving timely, personalized and professional information and obtaining timely feedback on issues of reproductive health to persons with disabilities (Ngunjiri, 2018)..

For majority of developing countries, SRH topics are treated as forbidden (CREA, 2016). The association of sexual and reproductive health taboo implies that a good percentage of the general population especially the marginalized do not have a chance to understand and debunk the myths associated with SRH (CREA, 2016).

A milestone in the current century is growth in use of ICT, importantly mobile phones. ICT has been a tool currently used to spread information and significantly health related information. CREA, (2016) points to the patent role of ICT in breaking discrimination and being a voice on matters on sexuality and SRH in a more private way. ICT is a vehicle that can be utilized to disseminate knowledge, information and awareness. On prima facie, conventional methods of providing sexual and reproductive health information in Kenya rarely reach the marginalized and some of these methods can include parents, care givers, teachers and peer to peer (Omondi, 2015). These information sources have own bias and rarely target persons with disabilities.

According to WRC (2015), the stories on persons with disabilities when it comes to accessing SRH are often burdened with hurdles such as negative attitude by the providers of the services; long wait time, high cost related to service delivery, limited accessibility, lack of respect by the providers to persons with disabilities and communication challenges. The burden worsens for women and girls with disabilities who are pregnant (WRC, 2015). In Uganda for instance, providers of sexual and reproductive health services are known to make derogatory statement against persons with disabilities.

Women Refugee Commission (2015) acknowledged that it is important for human beings to exercise SRH rights. Of great concern is either partial denial of the ability to exercise such rights by persons with disabilities or the full denial of such rights done to persons with disabilities. Cases of forced abortion or the family deciding on the fate of the persons with disabilities are reported in Uganda (WRC, 2015).

1.2 Problem Statement

The passing of the UN Convention on the Rights of Persons with Disabilities (UNCRPD) was a monumental occurrence in the lives of persons with disabilities. The countries involved ratified and pledged to promote inclusion of the disabled (Banks & Polack, 2014).

However, it is noted that states continue to struggle in meeting the prescriptions of the convention and there is a general lack of progress in the implementation of commitments set by the Convention. This has subsequently affected WWD who continue to experience persistent inequalities in the social, political, cultural and economic aspects. Health wise, WWD experience recurring medical costs which influence their long-term health including their sexual and reproductive health. Services towards women with disabilities have been affected by these generally held assumptions. Further to this, women with disabilities continue

to be side-lined by the commonly held assumption that they are sexually inactive and therefore do not need any sexual and reproductive healthcare (Frohmader & Ortoleva, 2013).

Apart from marginalization and discrimination focus when it comes to reproductive and sexual health often emphasis on adolescent and youths. Examples include the study by Omondi (2015) which pushed for the provision of timely information through ICT to urban youths by utilizing ICT as an effective way to addressing reproductive health related issue. In addition, the National Adolescent Sexual and Reproductive Health Policy is skewed to the adolescent (Republic of Kenya, 2015). The policy though recognizes the needs of adolescent with disabilities, it proposes the utilization of ICT. However, it fails to give a comprehensive process or even point to a road map for the usage. The launch of "ABLE-App" was a pointer to the right direction in having a breakthrough to disseminating and providing information to persons with disabilities on sexual and reproductive health. The new application facilitates access to information on sexual and reproductive health apart from being an integration to the inclusive health education program in the country.

The App is part of the program for United Nations Population Fund where Kenya is a member. Borrowing from the experience of India and with a high rate of smart phone penetration in Nairobi City County, it is timely to unearth the role ICT plays in the delivery of sexual and reproductive health to persons with disabilities.

Women with disabilities need and continue to procreate but their health insufficiencies and neglect by the health system has made it a daunting challenge to realize their sexual and reproductive health rights. One of the suggestions is the use of ICT which remains scarce especially in the developing world. This study therefore sought to examine accessing ICT in the delivery of sexual, and reproductive health services to WWD.

1.3 Research Questions

The overall question for this study was: How is ICT utilized in the delivery of sexual and reproductive health services to women with disabilities in Nairobi City County? The three specific research questions for the study were:

i. What is the nature of reproductive health needs of women with disabilities in Nairobi City County?
ii. What are the characteristics of ICT essential in sexual and reproductive health delivery to women with disabilities?
iii. How is ICT utilized in delivery of sexual and reproductive health services for women with disabilities in Nairobi City County?
iv. What is the overall impact of ICT in facilitating access to reproductive health services amongst women with disabilities?

1.4 Objective of the Study

The overall objective of this study was to understand the utilization of ICT in delivery of sexual and reproductive health services. The specific objective for this study were:

i. To examine the nature of reproductive health needs of women with disabilities in Nairobi City County
ii. To examine the appropriate ICT characteristics in delivery of sexual and reproductive health services to women with disabilities in Nairobi City County
iii. To establish the utility of ICT in delivery of sexual and reproductive health services to women with disabilities in Nairobi City County
iv. To assess the overall impact of ICT in facilitating access to reproductive health services amongst women with disabilities in Nairobi City County

1.5 Justification/ Significance of the Study

Access to sexual and reproductive health is a fundamental human right. In this regard, this study is of great importance in understanding the progress made in providing this fundamental right especially to the marginalized groups with focus on women with disabilities. The study also extents on existing literature on sexual and reproductive health to WWD, an area which has been given little focus by antecedent scholars in the same or related field thus elevating the knowledge repository. In addition, this study contributes to the debate on the role of innovation and ICT in promoting human rights and service delivery especially from the vantage point of the marginalized persons. Overall, this study provides a framework for formulation of policy on sexual reproductive health and service delivery to women with disabilities.

1.6 Scope and Limitations of the Study

This study examined the nature of reproductive health needs of women with disabilities in Nairobi City County as well as the appropriate ICT characteristics in delivery of sexual and reproductive health services to women with disabilities. Further, the study aimed at establishing the utility of ICT in delivery of sexual and reproductive health services to women with disabilities. The study also assessed the overall impact of ICT in facilitating access to reproductive health services amongst women with disabilities. Nairobi City County has approximately 50,000 persons with disabilities. The study site was selected for this study because it has slightly more informed groups of persons with disabilities. This county is also known for being a leader in adoption, diffusion and use of technology. This placed persons with disabilities in Nairobi City County to be at a position where they are quick to embrace technology compared to their peers in the rural area as well as in other urban areas.

Nevertheless, by focusing narrowly on Nairobi City County, this study left out a segment of the rural population which may have a significant number of WWD facing other unique sexual and reproductive health needs. Obtaining a data frame that provides secondary information on the number of women with disabilities in Nairobi could have been a challenge since the information is fragmented and not fully developed. From both the global and geographic perspective, the project focused on Nairobi City County with the knowledge that reproductive and sexual health issues are personalized and greatly influenced by the norms of a given community thus the gap on information needs by other counties and countries may not have been fully unearthed.

1.7 Operational Definition of Terms

Information Communication and Technology: This refers to combination of audio- visual technologies together with computer networks.

Disability: Any form of impairment which limit persons from carrying out ordinary human activities.

Physical Disability: When an individual with a set of conditions that results in difficulties in movement, holding/grasping, feeling, movement coordination, height and ability to perform physical activities experience a barrier to do an activity in the society then that individual has a physical disability.

Hearing Disability: A situation where individual (s) with various degrees of loss of hearing such as mild, moderate, profound or severe degrees experience a barrier in trying to participate in the daily activities of life.

Visual Disability: A situation where an individual with partial or total loss of vision or ability to see and read experience barriers or challenges in participating in the daily activities of life.

Psychosocial Disability: Psychosocial disability refers to persons affected by a "medical or psychiatric condition which impairs a person's emotion-cognitive behaviour and affects his/her individual functioning in the society.

Intellectual Disability: A life-long limitations of the cognitive and intellectual abilities of a person that often results in the person requiring supervision in connection with daily activities. It affects the ability to comprehend and learn; ability to solve problems; ability to remember; ability to learn new information and skills, including social skills. Intellectual disability often has its onset in childhood, and is often linked to brain development problems prior to or at birth.

Persons with Albinism: These are person born with inherent genetic disorder affecting pigmentation of the skin.

Persons with Multiple Disabilities: Persons presenting more than a single type of disability at the same time.

CHAPTER TWO

LITERATURE REVIEW

2.1 Literature

2.1.1 Reproductive Health Needs for Women with Disabilities

For the health needs of women with disabilities to be met, awareness, knowledge and understanding should be done. WHO and UNFPA (2009), pointed out that there is lack of awareness, knowledge and understanding on sexual and reproductive needs of persons with disabilities. Moreover, it is noted that one in every 10 persons has a disability though they are invisible (WHO and UNFPA, 2009). In Kenya, approximately 1.7 million people are classified as PWD according to 2008 study by National Coordinating Agency for Population and Development (NCAPD, 2009). Their invisibility makes policy makers not to prioritize their needs and assume incorrectly that they are not sexually active thus their SRH not met.

From the human rights perspective, sexual and reproductive rights are basic human rights (Frohmader & Ortoleva, 2013). SRH rights are alongside human rights acknowledged globally, regionally and within the national legal frameworks (Frohmader & Ortoleva, 2013). 'They comprise individual rights on health relationship, marriage and sexual control without any stigma and discrimination (Frohmader & Ortoleva, 2013).

Nevertheless, women and girls with disabilities globally have not been granted nor benefited from these rights. In the contrary, prejudice which is systematic, and discrimination happen to them with various forms of violation to the SRH rights including forced /pressurized sterilization, limited contraceptive choices, suppressed menstrual cycle, poorly handled pregnancy and birth, forced abortion, GBV and torture (Frohmader & Ortoleva, 2013). Exclusion and denial of SRH services is also an experience they undergo (Frohmader & Ortoleva, 2013).

According to Frohmader & Ortoleva (2013), PWDs especially women and girls lack access to SRH services and programs. Discrimination is faced by PWDs in accessing and using the SRH services and programs, with many not getting the services and programs they need to meet their SRH rights. If the services are availed, a number of WWD are not included on economic, social, psychological and cultural grounds which impede their access. Services that they do not enjoy include right to choices and services geared toward menstrual management, family planning contraceptives, safe abortion, management of sexual health, pregnancy, parenthood, birth, surrogate reproduction and menopause which are either inappropriate, not available or inaccessible (Frohmader & Ortoleva, 2013). Services such as screening for breast cancer or cervical cancer are not offered to PWDs yet they face significant loss of life as a result of cancer (Frohmader & Ortoleva, 2013).

Meeting the SRH rights of persons with disabilities require addressing the physical and attitudinal barrier to health services. WHO and UNFPA (2009), points to the hurdles to access which reflect lack of awareness and forethought which the thinking that is way costly addressing the barriers. Attitudinal change is noted to be way difficult compared to removing the physical barrier (WHO and UNFPA, 2009). With a negative attitude and physical barrier, access to SRH is a challenge to persons with physical disabilities.

Ngugi (2012) while exploring the challenges women with disabilities face while accessing SRH services in public hospital in Nairobi used a social model approach and qualitative approach to understand the challenges. The findings unearthed PWDs seeking SRH services in public hospitals. Services PWDs seek from hospitals include family planning, VCT, maternity related and treatment related to their impairments.

Persons with disabilities need to be included in making decision pertaining to SRH. (WHO and UNFPA, 2009) noted that exclusion of WWD happens on issues of their decision making. This

comes from the backdrop of programs intended for persons with disabilities degenerating them as passive recipients of the service. (WHO and UNFPA, 2009) points to meaningful programs targeting persons with disabilities converting them to passive recipients of services. Even on negotiating tables, persons with disabilities are not given okay to exercise their right to voice their opinions (WHO and UNFPA, 2009).

Considering the gendered dimension of SRH for persons with disabilities, men with disabilities encounter gendered-related concern (WHO and UNFPA, 2009). Education on SRH for many communities, as women receive instructions about SRH in institution such as family and school, young men have no choice but to gather information from the streets (WHO and UNFPA, 2009). The information is coded through jokes and machismos. The unreliability and inadequacy of the information is a barrier on the part of young men receiving information. Furthermore, it is noted that young men with mental and intellectual impairments are staved off SRH information (WHO and UNFPA, 2009). Addressing the gender gaps in SRH is vital to meeting the SRH of persons with disabilities in Nairobi City County.

Men too with disabilities also suffer sexual exploitation. Unlike popular belief that men are not sexually abused, both men and women with disabilities are vulnerable to abuse from both male and female perpetrators (WHO and UNFPA, 2009). SRH gaps for PWD need develop effective mechanisms for reporting and dealing with cases of exploitation on the part of persons with disabilities. Programs should include capacity building for persons with disabilities to have ways of reporting such cases. However, this paper will focus on women with disabilities.

Assurance on SRH services to these groups should be from youth friendly, graduating to age for family: couples with disabilities and women, just like the rest need information on family planning for decision making (WHO and UNFPA, 2009). Health care providers and care givers have an obligation to encourage, give support to and provide appropriate services in the course

of life to all, whether with disabilities or not, for both wanting to have children or requiring information on avoiding pregnancies (WHO and UNFPA, 2009).

2.1.2 Characteristics of ICT Essential for SRH Services

In addressing the SRH services for women with disabilities, needs-based approach is required. Life cycle approach is recommended by WHO. The approach points to women with disabilities having SRH services that changes within the lifecycle (WHO and UNFPA, 2009). For every age group, there are unique challenges that should be addressed, e.g. the needs of adolescent at puberty should incorporate information on the body changes and emotions, with choices they face and sexual and reproductive health related behavior (WHO and UNFPA, 2009). Other information that the adolescents with disabilities require pertains to unique training relating to sexual violence and abuse and the right of protection from such.

Access borrowing from the definition by Global Initiative for Inclusive ICTs (G3ict) refers to "a measure of the degree that a good or service may be utilized by disabled person successfully in absence of the predicament or disabilities. It suggests that ICTs as obtained from the Constitution and as required to be used in the ICT structure. This consists mainly of persons with disabilities viewpoint of crucial ICTs; comprehending essential ICTs; and experience in application of ICTs."

Access to SRH for the purposes of this research implies the utilization of ICT services. KNSPWD (2008), defines the use of the Reproductive Health Services as state of wellbeing in matters of reproductive health function and processes. A survey conducted by KNSPWD (2008), on contraceptive use by PWDs established that of ages 12-49 years, only 16% used family planning contraceptives. Other methods of family planning were abstinence and the sterilization. The low usage of contraceptive and sterilization is a worrying concern. Sterilization is often done to PWD without consent and to keep them off passing genes to the

next generation. This calls for the need to provide information to PWDs on matters of their sexuality and reproductive health options.

2.1.3 ICT Utilization for SRH Services

According to (WHO and UNFPA, 2009) approximately, 15% of the world's population is PWDs. (WHO and UNFPA, 2009) noted that persons with disabilities have similar sexual and reproductive needs as other people. However, they face the hurdle of access to information and services. Of importance to note is that existing services can be tailored to serve women with disabilities. Awareness increase is the first and major milestone. Inclusion of WWD in designing programs and monitoring milestone will help bridge the gaps.

Ngugi (2012) in his study pointed out that women with disabilities facing several challenges including difficulty in accessing the facilities (physical barrier), negative attitude of the medical personnel towards SRH and lack of assessment tools to ensure services that are friendly to women who are PWDs. It was concluded that the barriers impede WWD from fully enjoying the SRH service with the underlying situation only furthering the marginalization agenda and denying women who are PWD rights to these services. The study recommended awareness on SRH and disabilities, improvement of physical access to medical facilities, training of medical personnel and tailoring materials to meet the needs of PWD (Ngugi, 2012).

Ngugi (2012) study elucidates on importance of prioritizing persons with disabilities. However, the study only points to personalizing the services without elaborating on how to implement such. The study too takes the gender dimension neglecting the fact that the aged and male are also likely to face different degrees of barriers. Meeting the SRH rights of persons with disabilities may require interdisciplinary approach that goes beyond the health facility and personnel reason enough for this paper to look into ICT and access to SRH among persons with disabilities.

On the adoption and sustainability of ICT by PWD in Nairobi City County using mixed methodology design the study by Njuguna (2016) revealed that the most common ICT used by PWDs were mobile phones, television and radio. The study further expressed the desire of PWDs to use internet through portable devices. The hurdle that PWDs faced in adoption of internet was limited capacity building and cost of some of the equipment. The study recommended affirmative action, increased accessibility and waivers to increase internet use by PWD.

The desire and willingness of PWD to use internet is demonstrated in the study by Njuguna (2016). The study further pointed to mobile phone technology adopted by PWDs showing that this could be a means to use for packaging information on SRH. The study by applying capability theory, demonstrated that ICT skills can be acquired and be of great benefit to women with disabilities. The study however had limitation in that it generalized the type of information which PWDs need and never reported on the outcome of the use of ICT skills.

2.1.4 Impact of ICT in Access and Utilization of SRH Services

The overall impact of ICT is described as profound in many countries within their political, social and economic spheres (Avis, 2015; UN, 2010). Most notable of the ICT is the mobile telephony that is vital in information sharing and presenting opportunities to information dissemination, hence equitable and sustained growth in both the north and the global south (Avis, 2015).

According to Avis (2015), ICT is a tool that has played a pivotal role in holding up development outcomes (facilitating market access, providing financial services and jobs, promoting transparency and accountability, ensuring effective service delivery and in the promotion of human rights development). Most of these milestones can be harnessed when addressing marginalization and in providing SRH services to women with disabilities. This is

a case witnessed with the utilization of internet by the youth to get discrete and private information on their reproductive and sexual health which otherwise could be inaccessible due to cultural barriers (Avis, 2015).

World Health Organization and United Nations Population Fund, 2009) stated that PWDs account for a significant portion of the world's population comprising the blind, deaf, other physical impairments, intellectual impairments or disabilities associated with mental health. A greater population of PWD live in poverty and faces different forms of stigma and discrimination, with most of the persons found in developing nations. (WHO and UNFPA, 2009).

World Health Organization and United Nations Population Fund recognized that there exists the historical suffering of PWD who have been denied access to information on their SRH. In addition, they have faced denial of their rights to start relationships and decide on when and with whom to have a family. (WHO and UNFPA, 2009) noted many women with disabilities are being subjected to sterilization, forced abortion and even forced marriage.

According to (WHO and UNFPA, 2009), SRH of PWD are significantly unmet, this is due to the persons working in this sector neglecting PWD. PWDs to a greater extend need SRH education and care owing to their increased vulnerability to abuse. World Health Organization and United Nations Population Fund (2009) points to PWDs staying ignorant to indispensable facts concerning themselves, their bodies and rights to identify their wants or their activities.

Persons with disabilities are thrice as much compared to persons without disabilities as victims of physical and sexual abuse and rape (WHO and UNFPA, 2009). In places where PWD live in institutions, group homes, hospitals or other group situations, they may not have the opportunity to make independent decisions on SRH; they could be victims of SRH abuse. PWDs may face violence since they could be relying on the perpetrators for their physical and

financial support (WHO and UNFPA, 2009). Reporting such cases may be a challenge due to a breakdown on legal and social systems. PWDs lack access to information on SRH, GBV and abuse (WHO and UNFPA, 2009).

Impediment to access and utilization of SRH among WWD include inadequate physical access as wells as lack of transportation and distance to clinics, lack of ramps and modified examination tables, inadequate communication materials, negative attitude of the healthcare providers and inadequate skills and knowledge on women with disabilities, poor coordination among health care givers, unavailability of funds, and lack of provision of health care insurance while worse situations exist in camps and other humanitarian crisis places (WHO and UNFPA, 2009).

On use of ICT, it should be noted that one's ability to utilize certain technology is affected by sensory, visual and mental disabilities (Njuguna, 2016). Information Communication Technologies – refer to any communicating device and application, comprising radios, TVs, mobile phones, PCs, satellite system, software and hardware, services and applications (Njuguna, 2016).

Sexual and reproductive health care providers can tailor their services using leveraging on technologies such as mHealth, which utilizes mobile technology to provide far flung consultation and visit patients health record (Avis, 2015). It has the latent role in closing the gaps in healthcare. Mobile for Reproductive Health (m4RH) created a set of information of short message service (SMS) on family planning methods which users get via mobile phones (Avis, 2015). This was a project funded by USAID and it targeted potential family planning users (Avis, 2015).

The project was implemented in Tanzania and Kenya to show how mobile phones can create an impact on issuance SRH services. The finding by Agarwal et al. (2016) and Williamson

(2013) on m4RH user reported satisfaction with those enrolled for the program as the messages were simple to comprehend and were informative.

ICT has effectively been used in promoting sexuality education, gender empowerment and life skills development in Nigeria (OneWorld, 2009). The overall goal of the program was to augment reduction in prevalence of SRH issues, HIV/AIDs through access to the right information via ICT (Avis, 2015). The target group was teens in school and the community centers. This was done by digitizing curriculum with information being availed on mobile phone (Avis, 2015). ICT devices enabled access to counsellors, endeavor to reach out and create impact on SRH education in Nigeria through young people utilizing ICT equipment equipped with relevant information; improved dialogue and reproductive health knowledge thus jumping the social and cultural hurdle (Avis, 2015).

According to OneWorld (2009), the utilization of ICT has enabled achievement of these goals with the life skills of young adults being improved in Nigeria.

2.2 Theoretical Review

2.2.1 Capability Theory

The first articulation of the Capability Approach was in 1980s by Amartya Sen, an Indian Philosopher. This concept derived from a lecture on "Equality of What" by Sen (Sen, 1979). In 1980s and 19990s, Sen furthered capability concept in his works. Martha Nussbaum, additionally articulated the capability theory (Nussbaum, 1988). The capability theory attempts to highlight different concern which Sen had in regard to current approaches employed in evaluation of well-being.

These concerns are: first, individual can have great variability in their abilities to transform the same resources into valued functioning, that is, persons with physical disabilities may require particular aid or good to accomplish mobility. Thus, evaluation which focuses purely on means

with no consideration of what certain individuals can do with them is not sufficient. Second, individuals can internalize the severity of their situations to the extent that they refrain from desiring achievement of what is beyond their expectation. Thirdly, whether individuals take up options at their disposal, given that they have valuable alternative is vital. This implies that evaluation should be sensitive actual achievements as well as effective freedom (capability). Finally, evaluation of the well-being of people must strive to be as open-minded as possible.

The capability theory emphasizes quality of life of an individuals as essential (Sen, 1999). The theory analyses life quality in terms of two key concepts (functionings and capabilities). By functioning, it implies the state of "being and doing" like having access to proper nourishment, possessing a shelter among other. A distinction should be made between these possessions and commodities used to achieve them (for example a woman with disability possessing sexual organ(s) should be distinguished from using them). On the other hand, capability refers to the set of valuable functionings that an individual accesses effectively. Therefore, capability of a person represents his/her effective freedom to make a choice between various combinations of functionings (Sen, 1999).

These could include between different kinds of life. It is argued further by Sen (1999) that capability theory can be employed to examine determinants that underlie the linkage between individuals and commodities. These include: individual physiology like variability related to illness, disability, age and gender; variability in social conditions which may involve aspects like provision of public amenities such as security, education among others and the form of community connections such across ethnic divisions and whether individuals have any disability or not; and how distribution occurs within a family (Sen). Rules of distribution within a family determines how food and healthcare are allocated between children and adults, males and females, people with disability and those without disability (Sen, 1999).

To this extend, it has been demonstrated that the capability approach can be used to examine access to SRH services by WWD. This postulation is anchored on the fact that the theory consider functionings and capabilities which squarely reflects what WWD go through. These group of women possess sexual and reproductive systems but whether they are able to use them fairly and freely is paramount as pointed out by this capability theory. The theory has also looks at how services and goods are distributed across different class. This leads to an important element of the treatment accorded to WWD in relations to access to various services. It should also be noted that, the capability approach contends that the impact of personal characteristics, including handicap and disabilities, that is impairment in disabilities theory, relate to a person's capabilities set and the measurement of poverty and well-being (Sen, 2002).

2.2.2 Social Constructionist Theories of Disabilities

The initial development of the rudimentary concepts of the social constructionist (at times just referred to as social model) was by the Union of the Physically Impaired against Segregation (UPIAS) in the 1070s (Anastasiou & Kauffman, 2011). The UPIAS is a United Kingdom based organization which advocates for the rights of persons with physical disabilities. After it had been conjured, the theory was popularized by various theorists and activists such as Paul Hunt, Colin Barnes and Michael Oliver among others. Indeed, it is Michael Oliver, an academic socialist with physical disability that played a central role in extending this model to other disabilities other than the physical disability (Anastasiou & Kauffman, 2011).

The social model of disability is premised on the proposition that rules defining normality and deviance are formulated by the dominant groups (Tregaskis, 2002; Turner & Louis, 1996). Bases on this, Turner and Louis (1996) perceived disability as one of the forms of social defined nonconformity. Guided by this theoretical spotlight, the perception about the environmental structures is that they include or exclude certain individuals. Consequently, the problem does

not rest with the individual but rather with the society through ways in which it defines and frames disability and non-conformity (May, 2006; Tregaskis, 2002).

Oppression resulting from structures instituted by the dominant group is one of the major concepts from the social constructionist theory. It is this oppression that defines normality and deviance. Anderson and Kitchin (2000) argued that disabled people face marginalization through societal attitudes and behaviors pertaining non- normative appearance and sexuality which are oppressive. Other than being patronized or pitied, being treated as invisible or being stared at, it is also commonly perceived that disability renders people sexually unattractive or unqualified to engage in affairs (Galvin, 2005). As a consequence of these societal attitudes and behaviors, PWD across all genders may realize that their opportunities for love, relationships as well as parenting are minimized (Ferri, & Gregg, 1998). Similarly, exclusion of PWD from institutions may signify absence of disability relevant information on sex education or services offered in planned-parenthood clinics. More so, WWD may be curtailed from access to birth control (Wilkerson, 2002). Given that social model recognizes the societal restrictions faced by WWD in their choice regarding sexual and reproductive activities, the conceptually framework of this study was formulated with much reliance on this model.

2.3 Theoretical Framework: Capability Theory and Social Model

The conceptual framework of this study was anchored both on Sen's theory of capability and the social model. Sen's theory postulates that the impact of personal characteristics, including handicap and disabilities, that is impairment in disabilities theory, relate to a person's capabilities set and the measurement of poverty and well-being (Sen, 2002). According to the social model, PWD are not allowed to freely make their own decisions regarding sex, relationships and parenting. Moreover, PWD especially women are discriminated when it comes to access to information on sex education or services in planned-parenthood. These

theories are essential in assessing access to and utilization of ICT for SRH among women with disabilities. Women with disabilities who have the capability to adopt and use ICT are more informed and are likely to overcome physical barrier, prejudice and cultural barriers, negative attitude and are well able to negotiate for safe sex or are more likely to be self-aware.

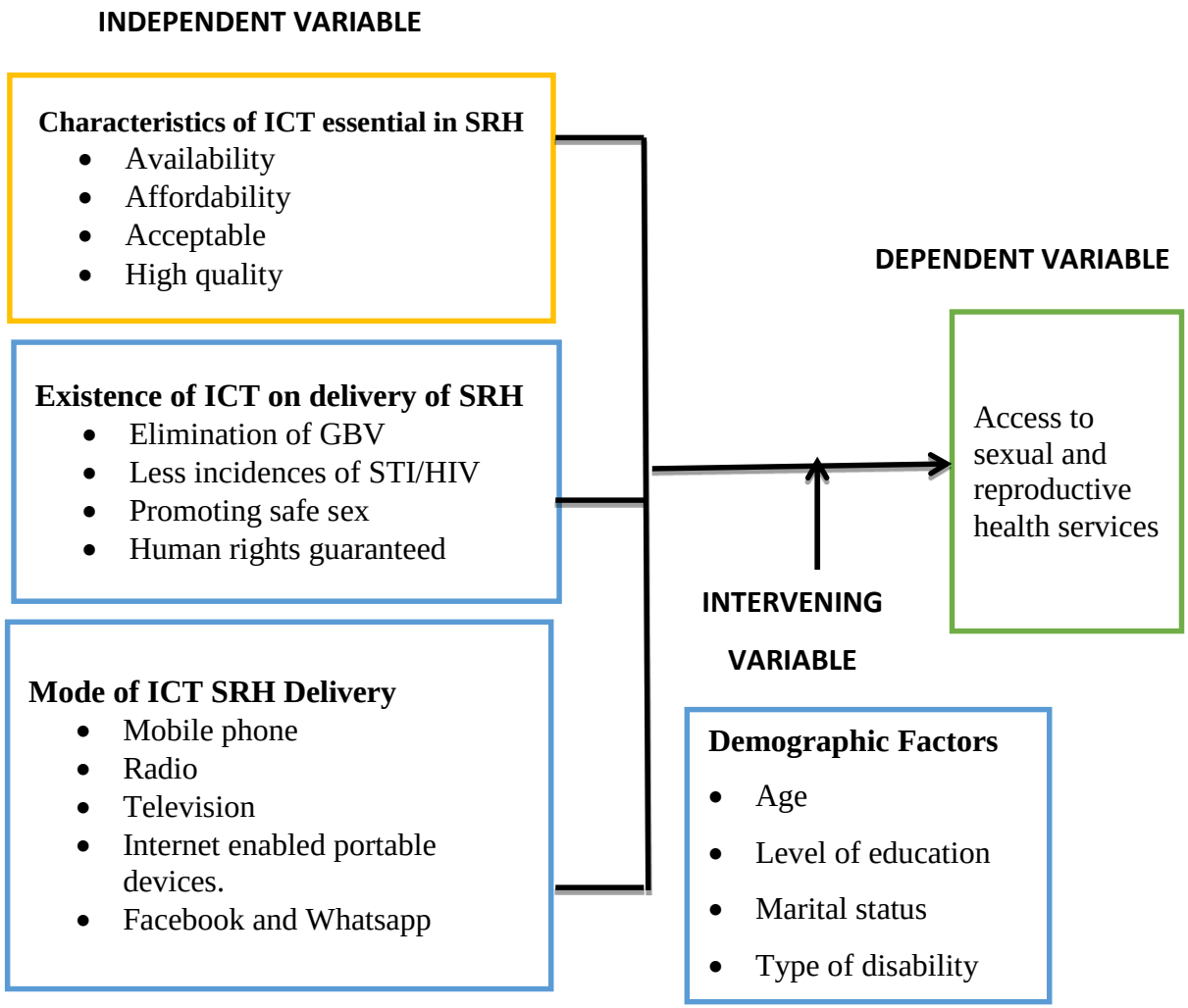
2.4 Conceptual Framework

It should be noted that the study was shaped by Sen's capability theory as well as the social model theory. The capability theory conceptualizes that the impact of personal characteristics, including handicap and disabilities, that is impairment in disabilities theory, relate to a person's capabilities set and the measurement of poverty and well-being (Sen, 2002). On the hand, social model makes it clear that it is not by nature that persons with disabilities are marginalized but because of the societal structure that makes them so. The social model demonstrates the plight of PWD including their restricted freedom on matters pertaining to sex, relationships as well as parenting among other acts of prejudice. Considering these arguments jointly, the use of ICT in accessing SRH is most probable to be an essential vehicle in building the capabilities of women with disabilities and helping them overcome obstacles such as STIs and HIV/AIDs. Being informed about their rights to SRH and accessing the services is important in decision making and in the overall creating opportunity to pursue education, carrier and decent jobs with the overall implication of escaping poverty and marginalization.

The two theories are appropriate when looking at the impact of access and utilization of ICT for SRH since information, remote access and ability to get feedback helps one overcome physical barrier, prejudice and negative attitudes. Through access to information, WWD can meet their full potential by delaying child birth where needed, delaying pregnancies and utilizing opportunities available for self-advancement. They are also better equipped to discuss safe sex and are more likely to be self-aware. The conceptual framework below summarizes

the relationship between the dependent and the independent variables. The independent variables in the present study were; characteristics of ICT essential in SRH, existence of ICT on delivery of SRH, and mode of ICT SRH delivery. The conceptual framework can be summarized as in Figure 2.1.

Figure 2.1: Conceptual Framework



The conceptual framework above shows a pictorial relationship between the dependent and independent variables. The dependent variable is access to sexual and reproductive health services by WWD in Nairobi City County. The independent variables are characteristics of ICT essential in SRH, existence of ICT on delivery of SRH, and mode of ICT SRH Delivery; the intervening variable are the facilitating conditions. It is thought that the characteristics of ICT essential in SRH including availability, affordability, acceptability and high quality influence access to sexual and reproductive health services; likewise, existence of ICT on delivery of SRH including elimination of GBV, less incidences of STI/HIV, promotion of safe sex and the guarantee of human rights will have an impact on the access to access to sexual and reproductive health services. The intervening variable, the facilitation conditions including age, marital status, level of education, occupation and the type of disability will influence access to sexual and reproductive health services notwithstanding the influence of the independent variables. As was revealed by the study, the mode of ICT SRH Delivery influences service delivery, but equally affected by individual's demographic factors.

CHAPTER THREE

RESEARCH METHODOLOGY

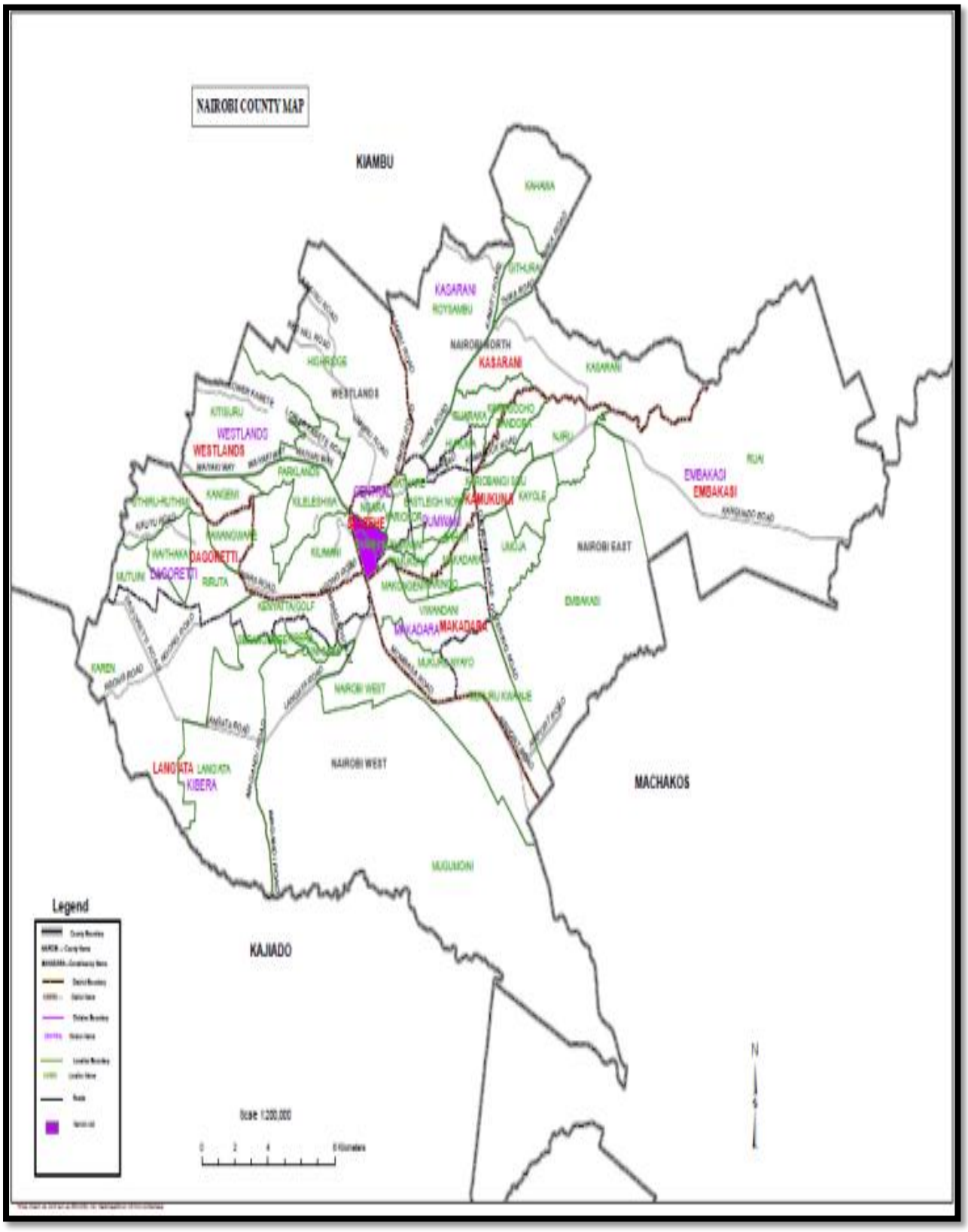
3.1 Introduction

This section delves into research methodology used by this study. The section comprises: research design, study site, population and sampling, data sources and data analysis.

3.2 Study Area/ Site Description

The study was conducted in Nairobi County, county number 47 as guided by the Constitution of Kenya (2010). This County's map is shown as Figure 3.1. Nairobi City County has a total of 17 sub-counties. The study site has one of the highest internet and ICT adoption in comparison to other counties in Kenya. In addition, the researcher is a resident of the County thus the economic cost of the study will be reduced.

Figure 3.1: Nairobi City County Administrative Boundaries



Source: Kenya National Bureau of Statistics (2010)

3.3 Research Design

This study used descriptive survey design for the benefits that it gives in providing insights on social issues (Kothari, 2004).

Mugenda and Mugenda (2003) contended that descriptive design is suitable to scholars who are investigating relationship between two variables. For this research descriptive design was partially suitable as it captured the relationship between access and utilization of ICT and service delivery to women with disabilities.

The ability of descriptive design to yield statistical information is of great importance to policy makers and hence Borg and Gall (1983) argued in its favor. The design was further chosen since the researcher had no ability to influence outcome or processes, a prerequisite asserted by Kothari (2004). The descriptive design further helped to yield correlation or establish interrelationship between variables thus making it ideal.

3.4 Unit of Analysis and Units of Observation

This research focused on women with disabilities who reside in Nairobi City County between the age of 19 and 50 years. Mugenda and Mugenda (2003) defined the unit of analysis as individual units that descriptive or explanatory statements are to be made on. Access to SRH via ICT was the unit of analysis.

Mugenda and Mugenda (2003) defines the unit of observation as either the object, subject, entity or item where data required in the research is obtained. In the case of this study, the data was obtained from women with disabilities in Nairobi City County and key informants. WWD in Nairobi City County and the key informants were the units of observation in this study. The different types of disabilities included in this study are: Physical disability, visual disability, hearing disability, intellectual disability, psychosocial disability, persons with albinism and multiple disabilities.

3.5 Target Population

The target population as defined by Mugenda and Mugenda (2003), imply the whole group of individuals, phenomena or objects with similar observable features. Women with disabilities in Nairobi City County in its 17 Constituencies formed the target population for this study. According to Kenya National Population and Housing Census of 2009, close to 50,000 people in Nairobi City County are with disabilities (KNBS, 2009). The figure is spread as follows: visual disabilities 24,659, hearing disabilities, 6,927, physical disabilities 17,130. It is also worth noting that the population of women with disabilities are estimated to be about 25,000. However, only 7453 women with disabilities are registered with National Council for Persons with Disabilities as of 2017 (NCPWD, 2017). The current study targeted women with disabilities in Nairobi City County who are registered with the National Council for Persons with Disabilities (NCPWD) and are in possession of identity cards as proof of their registration with the NCPWD.

3.6 Sampling Procedure

Sampling procedure is the process used in selecting a sub-set of cases for purposes of withdrawing conclusions about the entire set. A sample of 75 women were selected from National Council for Persons with Disabilities headquarters along Waiyaki way, with 10% of the registered women with disabilities targeted. Mugenda and Mugenda (2003) recommend that sampling should represent between 10-30% of the target population. Due to difficulties in accessing the sampling frame from National Council for Persons with Disabilities on registered women, non-probability sampling was applied in the study. To be specific convenience sampling through Mall techniques sampling method was used in the study.

The sample selection was based on the following criteria/considerations:-

a) Selection of Place to carry out convenience sampling

Convenience sampling requires the selection of platform or place that is used to select the targeted respondents. In the current study, National Council for Persons with Disabilities was selected because on a daily basis it receives over 50 persons with disabilities from Nairobi County and surrounding counties (Kajiado, Kiambu County and Muranga County). This was done through seeking permission from the administration of National Council for Persons with Disabilities.

b) Inclusion Criteria of the Study

The study applied inclusion criteria that included the following:

Only women who are registered with National Council for Persons with Disabilities were selected for the study, specifically those with registration cards.

Only women respondents within the reproductive age of 19-50 years were selected. Women below the age of 19 years were left out because they belonged potentially to the age of secondary school going, and their use of ICT services may be limited as they are school going.

Only women residing within Nairobi City County were selected. National Council for Persons with Disabilities daily receives persons from Nairobi and Surrounding counties and thus it was necessary to exclude women from other counties.

c) Voluntary participation in the Study

Women who met conditions (b) above were requested for their permission to participate in the study. Permission was sought from the prospective respondents by researcher explaining to them the purpose of the study, potential study benefits and costs. Thereafter their consent was sought before participating in the study. To ensure that the results are representative of Nairobi City County the researcher made sure that at least

4 women were selected from each of the 17 constituencies. The researcher had a provision for sign language interpreter during data collection process at questionnaire data collection and focus group discussion.

3.7 Methods of Data Collection

The study used questionnaires, Key informant guides and focus group guides to collect both qualitative and quantitative data.

3.7.1 Collection of quantitative Data through Questionnaires

Questionnaire were used to collect data from women with disabilities. The use of questionnaire was expected to elicit responses that helped the researcher provide answers on the nature of reproductive health needs of women with disabilities, ICT characteristics in delivery of sexual and reproductive health services, utilization of ICT in delivery of sexual and reproductive health services and impact of ICT in facilitating access to reproductive health services. Questionnaires were administered by the researcher in conjunction with the support of 2 trained researcher assistants. Data was collected through a questionnaire over a 7 day period from 16st September to 24th September 2018. Respondents were selected through the sampling procedure described in section 3.6 above. Face to face interview was used to collect data from the 75 respondents. Face to face interviews were used as they allowed the researcher to clarify and explain any questions not understood during the interview process. This was important as it helped reduced response errors in the study.

3.7.2 Collection of Qualitative Data

Key Informant Interviews

This involved administering key informant interview guide to selected institutions and selected participants. The institutions selected in the study included National Council for Person with Disabilities, UNFPA, WHO, Nairobi City County, Sexual Reproductive Health and Rights Alliance and FIDA. From the targeted institutions, 5 key informants participated in the study as shown in appendix iv. The study informants were selected purposively for their expert knowledge on ICT in sexual and reproductive health as programmes managers or by virtue of their work in sexual and reproductive health matters. The key informants were conducted by the researcher between 27th September and 9th October. The interviews were carried out by the researcher through a face to face interviews. This was to help the researcher to probe questions thereby allowing in-depth understanding on ICT usage and effectiveness in delivery of sexual and reproductive health services in Nairobi City County.

Focus Group Discussion

Focus group discussion were also conducted in the study, with a total of three focus group conducted. Three focus group were conducted for the following categories: Youths and Unmarried women (19-35 years of age), Married women (30-40 years of age) and Married women (40 years and above). The reason for the disaggregation used in the study is because according to UNFPA (2016), women between ages 30-40 years and above 40 years have different reproductive health needs. The focus group participants in the three groups were between 6-8 participants. Focus group were held to discover the attitudes, beliefs and perceptions of the respondents in regards to ICT usage in delivery of sexual and reproductive health services.

To organize the focus group participants, the researcher contacted National Council for Persons with Disabilities for referral to organization dealing with women with disabilities in Nairobi, and Women and Realities of Disability was selected to help in getting participants as they had a database of women who had participated in sexual and reproductive programmes through ICT. Through the database at Women and Realities of Disabilities Organization, contact number of different women were sourced. The focus group was conducted with the researcher as the moderator while one research assistant was the note taker. Smart phone was used to record the proceeding as the researcher lacked a recorder. The attitudes, beliefs and perceptions of the respondents concerning ICT usage in delivery of sexual and reproductive health services to women with disabilities were captured during the FGD session.

3.8 Ethical Considerations

The letter of introduction from the university was used by the researcher to seek permission from National Council for Persons with Disabilities in Kenya, the reference place for contacting study respondents. The researcher and research assistants introduced themselves to the respondents, explained the purpose of the study and its benefits to them and the society after which the researcher sought for informed assent and consent. Among other ethical issues, this research puts into consideration issues of plagiarism. Mugenda and Mugenda (2003), clearly noted that a researcher needs to recognize the works of the researcher that the research is quoting from. The researcher sought consent from the respondents and described the voluntary nature of participation, withdrawal, refusal to answer questions, expected benefits of participation, confidentiality and duration of the study.

3.9 Data Analysis

The study generated both quantitative and qualitative data. The qualitative data was recorded, transcribed and thematic analysis conducted to get the emerging issues on ICT utilization for SRH services among WWD. Verbatim and interpretation of phrases was done to help in understanding issues on SRH and women with disabilities. Analysis for the quantitative data after data entry in excel, with SPSS 22.0 used for the analysis of the quantitative data generated from the field. Descriptive statistics were performed on the data collected. The results are presented using frequency tables.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter presents the empirical results of the study. The findings reported in this chapter is centered on the primary information gathered from women with disabilities within Nairobi City County using questionnaires supplemented by focus group discussion and key informant interviews where participants were persons familiar with matters of SRH in relation to persons with disabilities and ICT. The chapter starts by highlighting demographic features of the respondents before switching gears to the main focus of the paper where the researcher presents a discussion on the findings in response to the research questions posed in chapter one. For coherence as well as ensuring rigorous coverage of each research question, the results are presented with somewhat strict adherence to the sequence of the study objectives outlined in chapter one. The results are presented majorly with the aid of frequency tables using percentages and actual head count.

4.2 Social and Demographic Characteristics of the Respondents

4.2.1 Age of Respondents

The age of the respondents was important since it helps in shedding light on the composition of women with disabilities (WWD) within Nairobi City County in regards to age. The study respondents were asked to state their age categories and the results summarized in table 4.1.

Table 4.1: Respondents' Composition by Age

Age group (in years)	Frequency	Percent
19-25	16	21.3
26-35	29	38.7
36-45	26	34.7
Above 45	4	5.3
Total	**75**	**100.0**

From the findings displayed in Table 4.1, majority of the women with disabilities (WWD) interviewed were within the age bracket of 26 to 35 years. This accounted for 29 out of the entire 75 respondents which translates to 38.7%. On the other hand, the age group Above 45 recorded the least proportion of respondents (4 respondents) equivalent to 5.3%. The remaining age groups 19-25 and 36-45 accounted for 21.3% and 34.7% respectively.

4.2.2 Marital Status of the Respondents

The researcher also looked into the marital status of the respondents (WWD) and the findings are captured in Table 4.2.

Table 4.2: Marital Status of the Respondents

Marital status	Frequency	Percent
Single	36	48.0
Married	16	21.3
Cohabiting	16	21.3
Separated	3	4.0
Widowed	4	5.3
Total	**75**	**100.0**

Table 4.2 shows that the population of WWD residing is Nairobi City County from 19 to 50 years of age largely comprises of single women (48.0%). The least proportion (4.0%) falls among the separated. The proportions of those married and those cohabiting were estimated to be equal with each typology accounting for 21.3%. WWD widowed accounted for 5.3% of the entire study sample. Evaluation of the results in Table 4.2 indicates that the proportion of those WWD cohabiting being high (21.3%) to the extent of leveling with their married counterparts can be interpreted by the researcher as a signal of lack of autonomy among the WWD to make decisions on sexual and marital issues and thus end up in the cohabiting even when they might have wished for alternative lifestyles such as being married or resorting to a single life.

4.2.3 Level of Education of the Respondents

In addition to other personal characteristics of WWD interviewed, the study also captured the respondents' level of education and the results for this are depicted in Table 4.3.

Table 4.3: Highest Level of Education Attained by the Respondents

Level of education	**Frequency**	**Percent**
None	5	6.7
Primary incomplete	7	9.3
Primary complete	4	5.3
Secondary incomplete	9	12.0
Secondary complete	13	17.3
Tertiary	37	49.3
Total	**75**	**100.0**

The results in Table 4.3 show that the highest proportion (49.3%) of the WWD residing in Nairobi City County had attained tertiary education. This signals a move in the right direction where WWD are increasingly getting access to education. Nevertheless, there is still elements of concern especially when the proportion of those who never stepped even in primary school (6.7%) exceeds those who made such attempt and completed (5.3%). More so, it is also worrying that primary school incompletion rate or simple dropout rates (9.3%) exceeds the proportion of those whose education was terminated after completing primary education (5.3%). It should also be noted from Table 4.3 that 12.0% and 17.3% represent the proportion of WWD who dropped out while in secondary school and those who did not get higher education after completing secondary school respectively.

4.2.4 Type of Disability of the Respondents

Focusing on how different types of disabilities are distributed among WWD residing in Nairobi City County, the study findings are summarized in Table 4.4.

Table 4.4: Type of Disability of the Respondents

Type of disability	Frequency	Percent
Physical disability	15	20.0
Visual disability	10	13.3
Hearing disability	11	14.7
Psychosocial Disability	13	17.3
Intellectual disability	7	9.3
Persons with albinism	11	14.7
Multiple disability	8	10.7
Total	**75**	**100.0**

The results from Table 4.4 shows that majority of WWD within Nairobi City County are persons with physical disabilities as reflected by 20.0%. Visual disabilities, hearing disabilities, psychosocial disabilities, intellectual disabilities and with albinism were estimated at 13.3%, 14.7%, 17.3%, 9.3% and 14.7% respectively. The findings also show that most of the women with disabilities in Nairobi City County are of a single form of disabilities. This is indicated by a small proportion (10.7%) of WWD in this region being persons with multiple disabilities.

The findings also show that most of the WWD who participated in the study have a single type of disability. This is reflected by the least proportion of WWD (10.7%) recorded to have multiple impairment.

4.2.5 Occupation of the Respondents

The researcher was also interested in the employment status of the WWD within Nairobi City County. The respondents were asked to indicate their employment status and the findings summarized in Table 4.5.

Table 4.5: Occupation of the Respondents

Occupation	Frequency	Percent
Employed	18	24.0
self-employed	21	28.0
Unemployed	36	48.0
Total	**75**	**100.0**

From Table 4.5, the highest proportion (48.0%) of WWD interviewed were noted to be unemployed. This high rate of joblessness among the women with disabilities augments their despondency given that they are already victims of other undoing arising from their varied impairments. The remaining 52.0% is apportioned such that only 24.0% are formally employed

while 28.0% are self-employed. What is even more devastating is that among those employed especially self-employed ones, majority were noted to be actually not gainfully employed as they engaged in activities with low returns which cannot fend for their needs with ease. The self-employed took part majorly in craftsmanship activities like tailoring, beadwork and such sort of activities where some had insignificant returns.

4.3 Nature of Reproductive Health Needs of Women with Disabilities in Nairobi City County

The first objective of this study was to examine the nature of reproductive health needs of women with disabilities in Nairobi City County. In order to achieve this objective, the study started by examining the respondents' awareness of any Sexual and Reproductive Health (SRH) services for women with disabilities before focusing on utilization of such services/needs. In addressing the first objective, the study also examined the importance of the various SRH services as well as the source of information on such services.

4.3.1 Awareness of SRH Need for Women with Disabilities in Nairobi City County

To examine SRH awareness, a question where respondents were asked if they were aware of any SRH services with expected yes/no answer was posed and the results for this are presented in Table 4.6.

Table 4.6: Respondents' Awareness on any SRH Services for Women with Disabilities

Respondents are aware of SRH services	Frequency	Percent
No	20	26.7
Yes	55	73.3
Total	**75**	**100.0**

Table 4.6 indicates that 73.3% of WWD in the study area were aware of at least one of their several SRH needs. The remaining proportion (26.7%) were however unaware of any of these needs. This magnitude of awareness is an indicator that WWD are increasingly gaining knowledge on their SRH needs. To ensure that this awareness subject is intensively understood, the researcher questioned the respondents to specify what they thought were the exact SRH services for WWD within the study area. As a guide to the respondents, the researcher devised a list of some expected SRH services for WWD and which the respondents were expected to select from. These services were: general information on SRH; contraceptive use/Birth control pills; access to SRH services/gynecologist, access to condoms and education on safe sex. The results for this quest is captured in Table 4.7.

Table 4.7: The SRH Services for WWD Respondents

SRH services	Frequency	Percent
General information on SRH only	3	4.0
Contraceptive use/Birth control pills only	6	8.0
Access to SRH services/gynecologist only	5	6.7
Access to condom only	0	0.0
Education on safe sex only	7	9.3
Any combination of the above	35	46.7
All of the above	6	8.0
All of the above + any other	10	13.3
Not aware of any	3	4.0
Total	**75**	**100.0**

The results displayed in Table 4.7 show that 4.0% of the respondents contended that general information on SRH was the only SRH service for WWD in Nairobi City County they were aware of. The proportions for those who were only aware of contraceptive use/birth control

pills, access to SRH services/gynecologist, access to condom and education on safe sex were 8.0%, 6.7%. 0.0% and 9.3% respectively. The results further indicate that 46.7% of the respondents were aware of at least two of the five aforementioned SRH services for WWD residing within Nairobi City County. The combination also included access to condoms which many of the respondents were aware of but were only mentioned alongside at least one of the other four services. Table 4.7 further shows that only 8.0% of the respondents was aware of all the five SRH services (general information on SRH; contraceptive use/Birth control pills; access to SRH services/gynecologist, access to condoms and education on safe sex), whereas 13.3% recognized all the five SRH services and some other needs. Among those who acknowledged the presence of other services, most of them mentioned HIV/AIDs management and HIV/AIDs counselling as key services of WWD within the study region. Finally, Table 4.7 reveals that 4.0% of the respondents were not aware of any SRH services for WWD within the Nairobi City County.

The results based on focus group discussion and key informant interviews extended the list of SRH services outlined in Table 4.7. Some of these additional SRH services for WWD include: entitlement to safe-abortion, autonomy in decision making such as these group of women should be free from forced sterilization, prenatal and postnatal information.

4.3.2 Utilization of SRH Services among Women with Disabilities in Nairobi City County

The researcher intensified the discussion on the nature of reproductive health needs of WWD within the study region by examining their usage rate. The respondents were asked to state if they had used any SRH service or not. Table 4.8 is a summary of SRH service usage by the respondents.

Table 4.8: Respondents' Use of SRH Services

Respondents ever used SRH service	Frequency	Percent
No	12	16.0
Yes	63	84.0
Total	**75**	**100.0**

The findings shown in Table 4.8 indicate that 84.0% of the respondents had access to and thus used at least one type of SRH services. The remaining 16.0% had zero access/use of any SRH service in their entire life prior to the time of the study. To enhance robustness in the discussion on the nature of the SRH services used, the 63 respondents (as shown in Table 4.8) who had indicated that they had accessed/used at least some SRH services were requested to indicate services they had used among the following: general information on SRH; contraceptive use/birth control pills; access to SRH services/gynecologist, access to condoms and education on safe sex. Table 4.9 summarizes their responses.

Table 4.9: SRH Service Accessed/Used

SRH service accessed/used	Frequency	Percent
General information on SRH only	6	9.5
Contraceptive use/Birth control pills only	12	19.1
Access to SRH services/gynecologist only	6	9.5
Access to condom only	0	0.0
Education on safe sex only	4	6.3
Any combination of the above	28	44.5
All of the above	3	4.8
All of the above + other	4	6.3
Total	**63**	**100.0**

The results in Table 4.9 show that the highest proportion (44.5%) of WWD who used some form of SRH services used a combination of such services. More so, any respondent who used and therefore accessed condoms also had access to at least some other form of services as indicated by zero percent access to condom alone but 4.8% access to all the five SRH services (inclusive of access to condoms). Singular use of general information on SRH, contraceptive use/Birth control pills, access to SRH services/gynecologist and education on safe sex accounted for 9.5%, 19.1%, 9.5% and 6.3% respectively. Table 4.9 also shows that, among the respondents who used some form of SRH services, about 6.3% of them used all the five major ones alongside other services which included access to HIV/AIDs counselling and testing, menstrual health services, hygiene and education.

4.3.3 Importance of SRH Services to Women with Disabilities

The researcher focusing on the rationale of the several SRH services, the respondents were requested to give their opinion on whether SRH services are of importance to WWD. These responses were captured in a Likert scale categorized as strongly agree, agree, somewhat agree, somewhat disagree, disagree and strongly disagree. See Table 4.10 for the summary of findings on this aspect.

Table 4.10: SRH Services are Important to WWD, Respondents' Opinions

Respondents' opinion	Frequency	Percent
strongly agree	66	88.0
Agree	6	8.0
somewhat agree	3	4.0
Total	**75**	**100.0**

The results in Table 4.10 is undoubtedly a clear indication that SRH services are of ultimate importance to WWD especially within the Nairobi City County. This argument is based on 88.0% of the respondents strongly agreeing to the fact that such services are important to WWD. 6% agreed whereas 3% somewhat agreed to the same. It should be emphasized that negating opinions (somewhat disagree, disagree or strongly disagree) on the same matter received zero support. The inquiry into the importance of such SRH services could not have been complete without seeking the opinions of the responses on what they considered to be such importance. Table 4.11 summarizes the results corresponding to this.

Table 4.11: Importance of SRH Services to Women with Disabilities

Importance of SRH services to WWD	**Frequency**	**Percent**
It helps meet the basic human rights	11	14.7
Access to SRH allows WWD to plan their family	15	20.0
It allows WWD to pursue carrier choices and education	3	4.0
Helps in the prevention of HIV/AIDs and STIs	7	9.3
Any combination of the above	26	34.7
All of the above	13	17.3
Total	**75**	**100.0**

From Table 4.11, it can be deduced that 14.7% of the respondents believed that SRH services helps women with disabilities to meet their basic human rights. 20.0% argued that the same services are necessary in aiding women with disabilities to plan their families. 4.0% supported the use of SRH services on the basis that such services all WWD to pursue carrier choices and education whereas 9.3% argued that use of SRH services is a significant step in the move towards prevention of HIV/AIDs and STIs. In addition, the results show that 34.7% of the

respondents argued that SRH services are important in a combination of at least two of the four ways aforementioned but not in all of them. However, 17.3% were satisfied that SRH is important in all such ways. What should be noted emphatically is that 100% of the respondents have at one point or another been in support of SRH services which compellingly persuaded the researcher to argue that availability of SRH services to WWD is indispensable and thus the availability such services should be advocated at all costs.

To close the discussion on the nature of SRH services/ nature of reproductive health needs, the researcher sought to know the sources of information on SRH for women with disabilities. The results for this investigation are summarized in Table 4.12

Table 4.12: Important Source of Information on SRH for WWD

Source of information for SRH	**Frequency**	**Percent**
Family/friends only	16	21.3
Religious centers only	0	0.0
City County health facility only	0	0.0
Mobile phone only	16	21.3
Societies e.g Chama, NGOs only	0	0.0
Radio only	7	9.3
Cyber café only	0	0.0
Any combination of the above	32	42.7
All of the above + any other	4	5.3
Total	**75**	**100.0**

The results in Table 4.12 indicate that families and/or friends were perceived by 21.3% of the respondents as an exclusively important source of information on sexual reproductive health for WWD. It can also be noted that mobile phones were perceived by 21.3% of the respondents as important sources of information on SRH for WWD while the corresponding proportion for radio was 9.3%. The results further indicate that all respondents who were for the opinion that religious centers, city county health facility, societies e.g. 'Chama', NGOs among others and cyber café are important sources of information had a similar view for at least one other source since these three sources had zero percent independently but there is evidence of some proportion (5.3%) of respondents acknowledging the importance of all the listed and other sources of information on SRH. It is also worthwhile pointing out that the highest proportion (42.7%) of the respondents believed that important sources of information on SRH comprised of a combination of at least two sources but not all of them.

4.4 ICT Characteristics Essential for Delivery of SRH to Women with Disabilities

This subsection majorly dwells on how the researcher addressed the second objective of the study which was to examine the appropriate ICT characteristics in delivery of sexual and reproductive health services to women with disabilities.

4.4.1 ICT in Service Delivery

In attempt to achieve the second objective, the researcher first sought the opinion of the respondents on whether they thought ICT can enable delivery of SRH services among WWD in Nairobi City County. The respondents were to reply with a yes or no. Table 4.13 is a reflection of these findings.

Table 4.13: ICT can enable Delivery of SRH Services among WWD in Nairobi City County

Response by the respondents	Frequency	Percent
No	8	10.7
Yes	67	89.3
Total	**75**	**100.0**

It is clear from Table 4.13 that 89.3% of the study respondents were for the opinion that ICT can enable delivery of SRH services among WWD in Nairobi City County while the remaining 10.7% were for the contrary opinion. To make the discussion on delivery of SRH services by ICT more meaningful and comprehensive, the researcher sought to establish the form of SRH services which can be delivered through ICT. Table 4.14 shows descriptive analysis results for the same.

Table 4.14: Forms of SRH Services for WWD that can be delivered through ICT

SRH forms delivered through ICT	Frequency	Percent
General information on SRH only	20	26.7
SRH services/gynecologist services only	3	4.0
Use of condoms only	5	6.7
Education on safe sex only	3	4.0
Information on menstrual cycle only	0	0.0
Any combination of the above	34	45.3
All of the above	10	13.3
Total	**75**	**100.0**

Table 4.14 shows that 26.7% of the respondents believed that general information pertaining SRH can be delivered through ICT. The results also shows that 4.0%, 6.7% and 4.0% respondents argued that SRH services/gynecologist services, use of condoms and education on safe sex respectively can be delivered through ICT. However, all the respondents who believed that information on menstrual cycle can be delivered through ICT had similar believe about other SRH services as well. This can be justified by zero percent exclusive use of ICT in delivery of information on menstrual cycle yet 13.3% supported use of ICT in delivery of all the SRH services. Finally, the findings also suggests that the greatest proportion (45.3%) of respondents were for the opinion that ICT can be used to deliver some combination of the SRH services.

4.4.2 ICT Mode and SRH Service Delivery

In further examining the concept of ICT features in relation to SRH service delivery, the researcher also interviewed the study data to establish the ICT mode which is important in delivering SRH services and summarized the findings in Table 4.15.

Table 4.15: Form of ICT Mode Important in Delivery of SRH Services

Form of ICT mode important in SRH service	Frequency	Percent
Mobile phone through SMS	14	18.7
Mobile phone application on smart phones tailored for SRH for PWD	3	4.0
Television	8	10.7
Radio	7	9.3
Any combination of the above	29	38.7
All of the above	4	5.3
Combination of the above + others	3	4.0
All of the above + others	7	9.3
Total	**75**	**100.0**

As suggested by the findings in Table 4.15, 18.7% of the respondents were satisfied that use of mobile phones through the short message services is an important ICT mode in SRH service delivery. The proportion in percentage for other ICT modes were estimated at 4.0%, 10.7% and 9.3% for mobile phone application on smart phones tailored for SRH for PWD, television and radio respectively. The results also show that the highest proportion (38.7%) of the respondents suggested that important way of delivering the SRH service is by using a combination of ICT modes. Only 5.3% of the respondents endorsed all the four ICT modes as being important in SRH service delivery while 4.0% suggested that some combination of the four major modes in addition to other modes is important for SRH service delivery. The remaining 9.3% argue that all the four aforementioned ICT modes plus some other modes which include social media platforms like Facebook and WhatsApp are important in providing SRH services.

Further analysis of ICT mode involved investigating the most appropriate of these modes to WWD in Nairobi City County. The researcher summarized findings related to this in Table 4.16.

Table 4.16: ICT Mode Most Appropriate to WWD in Nairobi City County

Form of ICT mode most appropriate to WWD	Frequency	Percent
Mobile phone through SMS	17	22.7
Mobile phone application on smart phones tailored for SRH for PWD	20	26.7
Television	8	10.7
Radio	4	5.3
Any combination of the above	22	29.3
All of the above + others	4	5.3
Total	**75**	**100.0**

Table 4.16 shows that 22.7% of the respondents perceived use of mobile phones via their SMS to be the most appropriate ICT mode for delivering SRH services within Nairobi City County. Furthermore, 26.7%, 10.7% and 5.3% perceived mobile phone application on smart phones tailored for SRH for PWD, television and radio respectively as the most important ICT mode suitable for women with disabilities. 29.3% of the respondents were for the opinion that ICT mode most appropriate for SRH service delivery among WWD was not any particular mode but a combination of different modes but not all of them. The remaining 5.3% of the respondents remarked that all the four ICT modes aforementioned plus other modes such as Facebook and other social media platforms such as WhatsApp are the most appropriate to WWD.

In addressing the concern of the second objective, there was also discussions involving focus groups. The participants of these groups suggested some ways by which SRH services of WWD can best be met by use of ICT. They argued that such appropriate ICT modes should be made easily available, affordable and accessible. More so, such services should be acceptable and of high quality.

4.4.3 Rationale of ICT for SRH to Women with Disabilities in Nairobi City County

The researcher while concluding the investigation related to ICT mode also asked respondents to enumerate advantages and disadvantages of using ICT to while delivering SRH services to women with disabilities. Among the advantages suggested were that ICT involves use of smartphones which are available and affordable; it is easy to access support group, privacy is ensured; it is easy and convenient to contact support team through distress calls or any other form of communication. More so, ICT allows users to maintain evidence in case needs for the same information arises. ICT was also noted to provide a wide range of information readily and at affordable cost. These ICT merits was compilation of the responses questionnaires.

Focus group discussion and key informant interviews. Indeed as suggested from by the key informant interviews, it is because of these merits that ICT devices have gained popular use relative to the convention ways of delivering SRH services within Nairobi City County. On the other hand, the study also unveiled some shortcomings of using ICT in delivering SRH services. For example, some social platforms such as Facebook accounts are not accessed/operated by everyone who may need them; not all individuals can afford or access ICT services; at times privacy is not guaranteed and also some prospect users may fail to use ICT gadgets due to challenges such as visual and hearing impairment.

4.5 Utilization of ICT in Accessing SRH Services

This sub-section is tailored towards achieving the third objective of the study. In attempt to realize this objective, the respondents were first asked if they had ever accessed SRH services through any ICT device and their resulting responses are captured in Table 4.17.

Table 4.17: Respondents have Accessed SRH Services through ICT Device

Ever accessed SRH service through ICT device	Frequency	Percent
No	18	24.0
Yes	57	76.0
Total	**75**	**100.0**

Table 4.17 shows that about 76.0% of the respondents had accessed SRH services through any of the ICT device while the remaining 24.0% were for the contrary opinion. This high rate of ICT usage is a clear indication of the increasing intensity of both access to SRH services and embracing of technology is delivering such services. To augment the analysis based on Table 4.17 which ensured that the third objective is explicitly addressed, the researcher looked into the SRH services accessed by the help of ICT and the findings were as depicted in Table 4.18.

The figures in Table 4.18 regards only those who actually used any of the ICT device i.e. 57 respondents as can be deduced from Table 4.18.

Table 4.18: Form of SRH Services Accessed through ICT

SRH service accessed through ICT	Frequency	Percent
General information of SRH only	11	19.3
Contraceptive use/Birth Control pills only	0	0.0
SRH services/gynecologist services only	3	5.3
Use of condoms only	0	0.0
Education on safe sex only	7	12.2
Information on menstrual cycle only	0	0.0
Any combination of the above	36	63.2
Total	**57**	**100.0**

The results from Table 4.18 show that 19.3% of the respondents who acknowledged using any ICT device to access SRH services had used such devices to purely access general information on SRH. The results further show that 5.3% and 12.2% had used ICT devices to have access to only SRH services/gynecologist services and education on safe sex respectively. The zero percent corresponding to contraceptive use/Birth Control pills, use of condoms and information on menstrual cycle can best be interpreted to imply that all respondents who accessed any of these three SRH services through ICT devices used such devices to access other SRH services. Moreover, the findings suggest that 63.2% of the respondents used ICT to access some combination of the SRH services. The 63.2% is an indication that a high proportion of WWD are relying on ICT devices to get access to multiple SRH services. This statistics can also be interpreted to suggest general rise in embracing ICT in the delivery of SRH services among WWD.

To exhaustively examine the element of ICT utilization in support for SRH service delivery, the study sought the opinion of the respondents on the rationale of ICT in enabling SRH service delivery to women with disabilities in Nairobi City County. The results based on a Likert scale are summarized in Table 4.19.

Table 4.19: ICT enables SRH Service delivery to WWD in Nairobi City County

Respondents' opinion on ICT enabling SRH service delivery	**Frequency**	**Percent**
Strongly agree	47	62.7
Agree	6	8.0
Somewhat agree	14	18.7
Somewhat disagree	5	6.7
Disagree	3	4.0
Total	**75**	**100.0**

From the findings displayed in Table 4.19, it can be deduced that 62.7% of the respondents strongly supported the contention that ICT enables delivery of SRH services to women with disabilities in Nairobi City County. The results also clearly indicate that 8.0% of the respondents agreed to the same contention whereas 18.7% were somewhat in agreement while 6.7% were somewhat in disagreement. Finally, only 4.0% disagreed while zero percent (0% not captured in Table 4.19) strongly disagreed. Such a massive proportion in agreement coupled by just a handful of the respondents having the contrary opinion is a signal for the critical role ICT is gaining in ensuring that SRH services are delivered to WWD.

It is also worthwhile noting that focus group discussion examined myriad ways ICT can be utilized to enable the delivery of SRH services of women with disabilities residing in Nairobi City County. Among the ways suggested by these teams of participants include regular use of SMS to frequently remind WWD to use contraceptive; use of majorly local radio stations where women are often invited to forums and training among other sessions that advance access to SRH services. There should also be free services for WWD such as helplines with zero calling charges. Moreover, these vulnerable individuals should be able to register for alert code which is sent to help team whenever there is danger faced by WWD. These focus groups also suggested that ICT utilization for SRH services in Nairobi City County can be improved through approaches such as partnership between governmental and non-governmental organizations both at national and county levels. WWD should also be supported to access cheap/free internet. In addition, intensive awareness crusade should be conducted such as road shows and IT clinics. In regards to the findings associated with key informants, one of the informants sourced from Sexual Reproductive Health and Rights Alliance Kenya while referring to how ICT can be used to deliver SRH services to WWD in Nairobi City County suggested that *"with the rise of technology use in Kenya over the past years, ICT has played a role creating awareness on SRH rights and services to WWD however if the ICT used in the delivery of such services were all inclusive and in easy to read formats, a higher number of WWD would access the SRH services".*

4.6 Impact of ICT in Facilitating Access to SRH Services amongst WWD

The fourth and last objective of this study was to assess the overall impact of ICT in facilitating access to reproductive health services amongst women with disabilities. In the pursuit to achieve this objective, the researcher started by asking the respondents their perception about the overall impact of ICT in enabling SRH service delivery to women with disabilities. The results for this analysis is presented in Table 4.20.

Table 4.20: Perception on the Overall Impact of ICT in enabling SRH delivery to WWD

Respondents' perception on overall impact of ICT on enabling SRH delivery to WWD	Frequency	Percent
Best option	27	36.0
Good	31	41.3
Not sure	17	22.7
Total	**75**	**100.0**

Results tabulated in Table 4.20 show that 36.0% of the respondents were satisfied that the overall impact of ICT in enabling SRH service delivery to women with disabilities was the best option. 41.3% considered it good while 22.7% were not sure. Other two opinion (bad and worse compared to what was available) received zero percent (0%) support each and hence not reflected in Table 4.20. Generally, the high combined proportion for those who perceived ICT use as the best option and good (36.0% + 41.7%=77.3%) is a probable indicator for highly hailed impact of ICT in enabling delivery of SRH services.

To advance the discussion on ICT impact, the respondents were also required to give their opinion (based on the degree of agreement) on whether ICT should be utilized to facilitate access to SRH for women with disabilities. The findings for this examination are presented in Table 4.21.

Table 4.21: ICT should be utilized to Facilitate Access to SRH for WWD

Respondents' opinion	Frequency	Percent
strongly agree	35	46.7
Agree	32	42.7
somewhat agree	8	10.7
Total	**75**	**100.0**

The analytical results shown in Table 4.21 revealed that 46.7% of the respondents strongly believed that ICT should be utilized to facilitate access to SRH services for women with disabilities. 42.7% of respondents simply agreed to this contention while only 10.7% were somewhat in agreement to the same argument. Not even a single respondent was either in a somewhat disagreement, disagreement or strong disagreement with the fact that ICT should be utilized to facilitate access to SRH for WWD. From this proportions, the researcher infers that ICT must be of consequential value with far reaching positive benefit. This is deduced from high proportion of respondents who either strongly agreed or just agreed that use of ICT is critical in facilitating access to SRH for WWD. In the contrary, none of the respondents negated such a proposition. The study further examined the views of the respondents on whether there are areas that should be improved in ICT for utilization in SRH services for WWD. The results are summarized in Table 4.22.

Table 4.22: There are ICT Areas that should be improved for Utilization of SRH Services for WWD

Respondents' opinion	Frequency	Percent
Strongly agree	38	50.7
Agree	23	30.7
Somewhat agree	14	18.7
Total	**75**	**100.0**

It is clear from Table 4.22 that 50.7% of the study respondents strongly agreed that there are ICT areas which require improvement to enhance utilization of SRH services among WWD. 30.7% simply agreed with the same proposition while 18.7% were somewhat in agreement with the same matter. None of the respondents either somewhat disagreed, disagreed or

strongly disagreed. From these proportions, the researcher is persuaded to believe that as much as ICT is instrumental in delivery of SRH services for WWD, a lot is still ought to be done to improve ICT.

After examining the impact of ICT utilization in SRH, the researcher sought to know if the respondents would recommend ICT to be used in SRH service delivery to women with disabilities in Nairobi City County. The entire sample made a recommendation that ICT be impressed in SRH services delivery to WWD residing in Nairobi City County. In support of this recommendation, the respondents gave varying reasons which include: ICT ensures proper records on present and future needs of the WWD are kept; ICT ensures that human rights are achieved; ICT increases access to information among the WWD who complained of often being denied access to some information. ICT was also noted to be helpful in reducing queues in health centers in search for SRH services that can otherwise be offered through ICT devices. More so, medical information provided through ICT devices were believed to be highly accurate as well as offered privacy especially with regard to specific information according to an individual's needs. Other respondents argued that ICT services can be person specific e.g. they can tailored to meet particular needs such as of the hearing impaired who would otherwise not access such information from audible sources.

The output of focus group discussion based on the suggestion of the participants as well as information from key informants revealed that ICT has plausible positive impact in facilitating access to SRH services amongst women with disabilities. Among the impacts of ICT noted from key informant interviews is increased awareness of SRH rights among the WWD and rising fearless push for this rights to be respected. Increased incidences of PWD (women inclusive) seeking defense from the corridors of justice may be linked to increased awareness on their rights due to heightening access to ICT. More so, ICT has the effect of increasing

independency and privacy and timely access to reliable and relevant information from social platforms such as Facebook and/or WhatsApp groups. On emphasizing the impact of ICT, one of the key informants who was a FIDA Program Manager and visually impaired in her own words argued that "*ICT overall impact comprises the voices of WWD through a large network coverage for instance legislations are passed to help improve on the status of WWD. WWD can use ICT to push for their agenda on issues affecting them*." Furthermore, ICT provides affordable means of delivering information.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter provides findings of the study in summarized ways followed by conclusion and recommendation based on the results. Possible suggestion for further studies are are discussed.

5.2 Summary

This study was conducted with the overall objective of understanding the utilization of ICT in delivery of sexual and reproductive (SRH) services to women with disabilities in Nairobi City County. The study was guided by four specific objectives. The first objective was to examine the nature of reproductive health needs of women with disabilities in Nairobi City County. Second, the study aimed at examining the appropriate ICT characteristics in delivery of sexual and reproductive health services to women with disabilities. Thirdly, the researcher sought to establish utility of ICT in delivery of sexual and reproductive health services to women with disabilities in Nairobi City County.

Finally, the study was aimed at assessing the overall impact of ICT in facilitating access to reproductive health services amongst women with disabilities. This study was motivated by the fact that rights of women with disabilities (WWD) which include their rights to sexual and reproductive health are persistently being prejudiced even at the time when there is world over crusade to champion for such rights. Use of ICT has received growing interest in the recent past but its adoption in developing nations remain scanty and thus the study was carried out Nairobi City County since this county is one of the highly technologically intensive region in Kenya.

In order to achieve its objectives, the study sampled out 75 women with disabilities across the 17 sub-counties of Nairobi City County. Data was gathered from 75 respondents using

questionnaires with both open and closed ended questions. Data from the 75 respondents was complimented by that from three focus group discussions as well as by informant interviews. Data obtained was then analyzed using descriptive statistics and presented majorly in frequency tables using head count and percentages.

The first objective of this study was to examine the nature of reproductive health needs of women with disabilities in Nairobi City County. Descriptive results revealed that 73.3% of the respondents were aware of the existence of some form of SRH services for the WWD while the remaining 26.7% of the respondents were not aware that SRH services of WWD existed in any form. The results also showed that among the different SRH services that existed, the respondents were aware of: general information on SRH; contraceptive use/Birth control pills; access to SRH services/gynecologist; access to condoms and education on safe sex. The highest proportion (46.7%) of the respondents were aware that multiple SRH services existed. Moreover, the results showed that 8.4% of the respondents had at one point prior to the study accessed/utilized some form of SRH services.

The second objective of the study was to examine the appropriate ICT characteristics in delivery of sexual and reproductive health services to women with disabilities. The results revealed that 89.3% of the respondents were for the believe that ICT can enable delivery of SRH services among WWD in Nairobi City County while only 10.7% were for the contrary opinion. Major SRH services that can be delivered through ICT included: general information on SRH; SRH services/ gynecologist services; use of condoms; education on safe sex and information on safe sex. Majority of the respondents believed that not any single SRH service can be delivered using ICT but rather multiple services. It was also noted that several forms of ICT mode are appropriate to deliver SRH services and these include: mobile phone through SMS; mobile phone application on smart phones tailored for SRH for PWD; televisions; radio;

social media platforms like Facebook and WhatsApp among other. For these ICT modes to be effective, the study found out that they should be easily available; affordable and accessible. More so, such services should be acceptable and of high quality.

The third aim of this study was to establish the utilization of ICT in delivery of sexual and reproductive health services to women with disabilities in Nairobi City County. The descriptive results showed that 76.0% of the respondents had accessed SRH services through ICT device, whereas only 24.0% had not used ICT devices to access SRH services. Among the SRH services accessed to via ICT devices include: general information of SRH; Contraceptive use/Birth Control pills; contraceptive use/Birth Control pills; use of condoms; education on safe sex and information on menstrual cycle. The findings painted a general picture that the respondents were for the opinion that ICT devices provide an enabling environment for delivery of SRH services.

The last objective of this study was to assess the overall impact of ICT in facilitating access to reproductive health services amongst women with disabilities. From a general stand point, the results revealed that majority (77.3%) of the WWD perceived ICT to have a positive impact on the delivery of SRH services. The remaining 22.7% was not sure and none of the respondents considered ICT to negatively impact SRH service delivery.

5.3 Conclusion

From the findings of this study, it can be inferred that there a significantly high level SRH needs awareness among women with disabilities residing in Nairobi City County. Other than increase in SRH needs awareness, a similar trend has been observed in access/utilization of various SRH services. The study also concluded that several SRH services can be delivered using ICT devices. Appropriate ICT devices should be easily available; affordable and accessible. More so, such devices should also be acceptable and of high quality.

Drawing from the findings related to the third objective, the researcher concluded that ICT is highly embraced by WWD within Nairobi City County. The researcher also inferred that use of ICT is highly significant in catalyzing access to SRH services among women with disabilities in Nairobi City County.

5.4 Recommendations

From the study findings, the researcher admits increased SRH awareness rate but suggests that measures such as use of public forums involving WWD, TV and radio programs covering on the SRH services among others should be used to push the awareness level even higher. Given the importance of ICT in delivering SRH services to WWD, the study suggests that ICT access should be made easier to this vulnerable group. Such ICT should not just be available but also made affordable and be of high quality. For example, there should be 24/7 helpline with zero calling charges, cheap and high speed internet should also be made available to women with disabilities. These moves calls for combined efforts by national and county governments and non-governmental organization and even individuals of good will. Apart from conducting crusades to popularize the SRH services WWD are entitled to, similar moves should also be made to educate WWD on the beauty of embracing technology while seeking SRH services. Most important is that all SRH services rendered to WWD via ICT should be all-inclusive.

5.6 Areas for further research

This study was focused on women with disabilities residing within Nairobi City County. However, there may be regional disparity in regard to the extent by which technology is embraced, SRH service awareness among other factors, thus there is need for replicating this study in other regions or counties in Kenya as well as in other developing or emerging nations.

REFERENCE

Agarwal, S., LeFevre, A. E., Lee, J., L'Engle, K., Mehl, G., Sinha, C., & Labrique, A. (2016). Guidelines for reporting of health interventions using mobile phones: Mobile health (mHealth) evidence reporting and assessment (mERA) checklist. *Bmj*, *352*, i1174.

Anastasiou, D., & Kauffman, J. M. (2011). A social constructionist approach to disability: Implications for special education. *Exceptional Children*, *77*(3), 367-384.

Anderson, P., & Kitchin, R. (2000). Disability, space and sexuality: Access to family planning services1. *Social Science & Medicine*, *51*(8), 1163-1173.

Avis, W. R. (2016). Mobile phone and social media interventions for youth development outcomes. Retrieved from http://www.gsdrc.org/wp-content/uploads/2016/01/HDQ1317.pdf

Banks, L. M., & Polack, S. (2014). The economic costs of exclusion and gains of inclusion of people with disabilities. *CBM, International Centre for Evidence in Disabilities and London School of Hygiene & Tropical Medicine*.

Borg, W. R., & Gall, M. D. (1983). Educational research an introduction. New York and London.

Bryman, A. (2012). *Social research methods* (4th ed.). New York: Oxford University Press.

Christoffel Blinden Mission (CBM). (2015). Dialogues on Sustainable Development: A Disabilities-Inclusive Perspective. Inclusive-Development-Dialogues. http://nation.lk/online/2016/01/02/mobile-app-on-reproductive-health.html

Communication Authority of Kenya (2016). Third Quarter Report on mobile phone penetration in Kenya

Constitution of Kenya, 2010.

Convention on the Rights of Persons with Disabilities (2006). *Health: Article 25*

CREA. (27 September 2016): ICT 4 SRHR: National Consultation on Leveraging Technology for Advancing Knowledge on Sexual and Reproductive Health and Rights. Retrieved from http://www.creaworld.org/events/ict-4-srhr-national-consultation-leveraging-technology-advancing-knowledge-sexual-and.

Ferri, B. A., & Gregg, N. (1998, July). Women with disabilities: missing voices. In *Women's Studies International Forum*, 21(4), 429-439.

Field, A. (2009). *Discovering Statistics using SPSS*. Sage: London.

Frohmader, C., & Ortoleva, S. (2013). The sexual and reproductive rights of women and girls with disabilities. International conference on human rights, Issues paper, July 1st, 2013. Retrieved from https://www.ohchr.org/Documents/Issues/Women/WRGS/ICP_%20Beyond_2014_International_Thematic_Conference/women_and_girls_with_disabilities_final.pdf

https//www.udpkenya.or.ke

Galvin, R. D. (2005). Researching the disabled identity: Contextualizing the identity transformations which accompany the onset of impairment. *Sociology of Health & Illness*, *27*(3), 393-413.

Kothari, C. R. (2004). *Research methodology: Methods and techniques*. New Age International.

Kuo, L. (2017). Kenya's mobile phone ownership is lower than we thought. Retrieved from https://qz.com/africa/900099/kenyas-mobile-phone-ownership-is-lower-than-we-thought

Mays, J. M. (2006). Feminist disability theory: Domestic violence against women with a disability. *Disability & Society*, *21*(2), 147-158.

Mugenda, O., & Mugenda A. (2003). *Research methods: quantitative and qualitative approaches*. African Centre for Technology Studies. Nairobi, Kenya.

National Coordinating Agency for Population & Development, NCAPD (2009). Policy Brief No. 3, Women with Disabilities Need Reproductive Health Services, Too

Ngugi, S. W. (2012). *The challenges women with disabilities face in accessing reproductive health services in public health facilities in Nairobi* (Master dissertation, University of Nairobi, Kenya). Retrieved from http://erepository.uonbi.ac.ke/bitstream/handle/11295/6803/Ngugi_The%20challenges%20women%20with%20disabilities%20face%20in%20accessing%20reproductive%20health%20services%20in%20public%20health%20facilities%20in%20Nairobi%20?sequence=1

Ngunjiri, J. (Tuesday, March 20, 2018). Business Daily: Kenya tops in phone internet traffic globally. Retrieved from https://www.businessdailyafrica.com/corporate/tech/Kenya-tops-in-phone-internet-traffic-/4258474-4349966-3m4lrez/index.htm

Njuguna, R. W. (2016). *Accessibility to Information and Communication Technology (ICT) Among Persons with Disabilities (PWDs) In Nairobi City County* (Master Dissertation, University of Nairobi). Retrieved from http://erepository.uonbi.ac.ke/bitstream/handle/11295/99022/MA%20Project%20Report%20Rose%20Njuguna.pdf?sequence=1&isAllowed=y

Nussbaum, M. (1988). Nature, Function, and Capability: Aristotle on Political Distribution. In *Oxford Studies in Ancient Philosophy*. Oxford: Oxford University Press

Omondi, F. (2015). *An Ict Intervention to Provide Timely and Contextualized Reproductive Health Information to Urban Teenagers* (Doctoral Dissertation, University of Nairobi).

OneWorld (2009). Learning about Living: Lessons Learnt 2007-2009. London: OneWorld. Retrieved from http://mobile.oneworld.net/docs/lal/Lessons_Learnt_Nigeria_2009.pdf

Perry, C. (1998). Processes of a case study methodology for postgraduate research in marketing. *European journal of marketing*, *32*(9/10), 785-802.

Republic of Kenya. (2015). National Adolescent Sexual and Reproductive Health Policy. Retrieved fromhttps://www.popcouncil.org/uploads/pdfs/2015STEPUP_KenyaNationalAdolSRHPolicy.pdf

Sen, A. (1979). *Equality of What?* Stanford University: Tanner Lectures on Human Values. Retrieved from http://www.ophi.org.uk/wp-content/uploads/Sen-1979_Equality-of-What.pdf

Sen, A. (1999). *Development as Freedom*. Oxford: Oxford University Press.

Sen, A. (2002). Health: perception versus observation: self-reported morbidity has severe limitations and can be extremely misleading.

Tregaskis, C. (2002). Social model theory: The story so far. *Disability & Society*, *17*(4), 457-470.

Turner, C. S. V., & Louis, K. S. (1996). Society's response to differences: A sociological perspective. *Remedial and Special Education*, *17*(3), 134-141.

United Nations. (2010). Fact Sheet: Information and Communication Technology. New York: United Nations.

Wilkerson, A. L. (2002). Disability, sex radicalism, and political agency. *NWSa Journal*, *14*(3), 33-57.

Williamson, J. (2013). SMS 4 SRH: Using Mobile Phones to Reduce Barriers to Youth Access to Sexual and Reproductive Health Services and Information.

Womens Refugee Commission, (WRC). (2015). Sexual and Reproductive Health and Disabilities: Examining the Needs, Risks and Capacities of Refugees with Disabilities in Kenya, Nepal and Uganda.

World Health Organization, WHO. 2011. World Report on Disabilities. www.who.int/disabilities/ world_report/2011/en/index.html

APPENDICES

Appendix I: Questionnaire

Access and utilization of ICT for delivery of sexual and reproductive health services to women with disabilities in Nairobi City County

Sub County……..

This questionnaire comprises five sections. Kindly read and answer all the questions in the questionnaire.

Section One: Socio-demographic information

(Tick the appropriate)

1. Age of the respondent 15-20 ( ) 21-30 ( ) 31- 40 ( ) 41 – 50 ( )
2. Marital Status: Single ( ) Married ( ) Cohabiting ( ) Separated Divorced ( ) Widowed ( )
3. Highest level of education attained: No education ( ) Primary Incomplete ( ) Primary Complete ( ) Secondary incomplete ( ) Secondary complete ( ) Tertiary ( )
4. Type of disability: Physical disability ( ), Visual Disability ( ) Hearing Disability ( ) Intellectual Disability ( ) Psychosocial Disability ( ) Persons With Albinism And Multiple Disabilities ( )
5. Occupation: Employed ( ) Self-employed ( ) Unemployed ( )

Section 2: **The nature of reproductive health needs of women with disabilities in Nairobi City County**

6. Are you aware of any SRH needs for women with disabilities? Yes ( ) No ( )

7. What do you think are the SRH needs for women with disabilities in Nairobi City County (multiple responses accepted:

   General information on SRH ( )

   Contraceptive use/Birth Control pills ( )

   Access to Sexual and reproductive health services/Gynecologist ( )

   Access to Condoms ( )

   Education on Safe sex ( )

   Other (specify) ……. ( )

8. Have you ever utilized any of the services you mentioned in 7 above Yes ( ) No ( )

9. If yes in 8 above, name the service(s) you accessed:

   General information of SRH ( )

   Contraceptive use/Birth Control pills ( )

   Access to Sexual and reproductive health services/Gynecologist ( )

   Access to Condoms ( ) Education on Safe sex ( )

   Other (specify) ……. ( )

10. Tick the appropriate

In your opinion, SRH services are important to women with disabilities, I	Strongly agree ( ) Agree ( ) Somewhat agree ( ) Somewhat disagree ( ) Disagree ( ) Strongly disagree ( )

11. Why is SRH important to women with disabilities?

    It helps meet the basic human right ( )

    Access to SRH allows women with disabilities to plan their family ( )

    It allows women with disabilities pursue carrier choices and education ( )

    It is important for the health of the women with disabilities ( )

    Helps in the prevention of HIV/AIDS and STIs ( )

    Other, specify ……..

12. What is the most important source of information on SRH for women with disabilities?

    Family/ friends ( )

    Religious centres ( )

    City County health facility ( )

    Mobile phone ( )

    Societies e.g. Chama, NGOs

    Radio ( )

    The cyber café ( )

    Others ( )

Section Three: Characteristics of ICT essential in sexual and reproductive health delivery to women with disabilities

13. Do you think ICT can enable delivery of SRH services among women with disabilities in Nairobi City County? Yes ( ) No ( )
14. What forms of SRH services for women with disabilities can be delivered through ICT?

    General information of SRH ( )

    Contraceptive use/Birth Control pills ( )

    Sexual and reproductive health services/Gynecologist services ( )

    Use of Condoms ( )

    Education on Safe sex ( )

    Information on menstrual cycle

    0ther (specify) ……. ( )
15. What form of ICT mode is important in SRH services?

    Mobile phone through SMS ( )

    Mobile phone application on smart phones tailored for SRH for persons with disabilities ()

    Television ( )

    Radio ( )

    Other ( )
16. Of the ICT modes in 15 above, which one is most appropriate to women with disabilities in Nairobi City County?

    Mobile phone through SMS ( )

    Mobile phone application on smart phones tailored for SRH for persons with disabilities ()

    Television ( )

    Radio ( )

    Other Specify ( )

17. What would you say are the advantages of ICT for SRH to women with disabilities in Nairobi City County?

    ……

    ……

18. What would you describe as the disadvantages of ICT utilization for SRH to women with disabilities in Nairobi City County?

    ……

    ……

Section Four: Establishing the level of utilization of ICT in delivery of sexual and reproductive health services to women with disabilities in Nairobi City County.

19. Have you ever accessed SRH services through any ICT device? Yes ( ) No ( )
20. What form of SRH service did you access through ICT?

    General information of SRH ( )

    Contraceptive use/Birth Control pills ( )

    Sexual and reproductive health services/Gynecologist services ( )

    Use of Condoms ( )

    Education on Safe sex ( )

    Information on menstrual cycle

    0ther (specify) ……. ( )

21. In your opinion, ICT enables SRH service delivery to women with disabilities in Nairobi City County, I,

    Strongly agree ( )

    Agree ( )

    Somewhat agree ( )

    Somewhat disagree ( )

    Disagree ( )

    Strongly disagree ( )

Section Five: The overall impact of ICT in facilitating access to reproductive health services amongst women with disabilities

22. In your opinion, how do you perceive the overall impact of ICT in enabling SRH service delivery to women with disabilities in Nairobi City County?

    Best option ( ) Good ( )

    Not sure ( ) Bad ( )

    Worse compared to what is available ( )

23. In your opinion, ICT should be utilized to facilitate access to SRH services for women with disabilities, I

    Strongly agree ( )

    Agree ( )

    Somewhat agree ( )

    Somewhat disagree ( )

    Disagree ( )

    Strongly disagree ( )

24. In your opinion, there are areas that should be improved in ICT for utilization in SRH services for women with disabilities in Nairobi City County, I

    Strongly agree ( ) Agree ( )

    Somewhat agree ( ) Somewhat disagree ( )

    Disagree ( ) Strongly disagree ( )

25. Would you recommend ICT to be used in SRH for service delivery to women with disabilities in Nairobi City County? Yes ( ) No ( )

26. Why would you recommend ICT for SRH services for women with disabilities in Nairobi City County?

    .....

    .....

    .....

    .....

Appendix II: Key informant interviews (KII)

Hello.

My name is Beryl Onditi, an M.A student from the department of Sociology and Social Work Development at the University of Nairobi. I am currently writing my dissertation. My research is on access and utilization of SRH among women with disabilities in Nairobi City County. The main research question for my study is on how the utilization of sexual and reproductive health impact on women with disabilities. Am requesting you to allow me to interview you for the next 20 -30 minutes. Your expertise and informed opinion will help shape this paper. The purpose of this research is mainly academic and no other purpose. I promise to keep your anonymity and the information you will provide will remain confidential.

Key informant's socio-demographic information

(Tick the appropriate)

1. Age of the respondent 15-20 ( ) 21-30 ( ) 31- 40 ( ) 41 – 50 ( ) Above 50 ( )
2. Marital Status: Single ( ) Married ( ) Cohabiting ( ) Separated Divorced ( ) Widowed ( )
3. Highest level of education attained: No education ( ) Primary Incomplete ( ) Primary Complete ( ) Secondary incomplete ( ) Secondary complete ( ) Tertiary ( )
4. Type of disability: Physical disability ( ), Visual Disability ( ) Hearing Disability ( ) Intellectual Disability ( ) Psychosocial Disability ( ) Persons with Albinism and Multiple Disabilities ( )
5. Job designation: ……

Section two: Interview Schedule

6. In your opinion, what are the reproductive health services for women with disabilities in Nairobi City County?

   ……

   ……

   ……

7. Why do you think ICT is important in the provision of sexual and reproductive health to women with disabilities in Nairobi City County?

   ……

   …….....

8. In your own view, why do you think ICT out-performs the conventional ways of delivering SRH to women with disabilities in Nairobi City Council?

   ……

   …….

9. In your own opinion, what are the challenges in Utilizing ICT for SRH for women with disabilities in Nairobi City County?

   ……

   ……..

10. In your own view, how do you think ICT can be utilized to deliver SRH services to women with disabilities in Nairobi City County?

    ……

    …….

11. In your own view, what are the overall impact of ICT in facilitating access to reproductive health services amongst women with disabilities?

    ……

    …….

12. In what ways would you recommend that ICT be utilized in the delivery of SRH to women with disabilities in Nairobi City County?

    ……

    ……

    ……

Appendix III: Focus Group Discussion

Hello.

My name is Beryl Onditi, an M.A student from the department of Sociology and Social Work at the University of Nairobi. I am in the company of my research assistant;..... My assistant will help me in recording our conversation. I am currently writing my dissertation. My research is on access and utilization of SRH among women with disabilities in Nairobi City County. The main research question for my study is on how the utilization of sexual and reproductive health impact on women with disabilities.

Our discussion will take approximately 30 minutes. We respect the opinion of each one in this group. The purpose of this research is mainly academic and no other purpose. I promise to keep your anonymity and the information you will provide will remain confidential. Please feel free to air your opinion:

1) What are the sexual and reproductive health needs of women with disabilities in Nairobi City County

2) How best can the sexual and reproductive health needs of women with disabilities in Nairobi City County be met? ……

3) In what ways can we utilize ICT to enable the delivery of SRH services of women with disabilities in Nairobi City County? ……

4) Overall, what are the impacts of ICT in facilitating access to reproductive health services amongst women with disabilities?

5) In what ways can access and utilization of ICT for SRH services be promoted in Nairobi City County? .....

Appendix IV: Key Informants

Informants	Organizations
Sara Ayiecho	Senior Disability Services Officer- NCPWD
Fancy Kirui	Sexual and Reproductive Health Programme Manager-UNFPA
Peter Njunguna	Director of Reproductive health services- Nairobi County
Mwikali Kivuvani	Program Manager- Sexual Reproductive Health and Rights Alliance
Samson Orao	FIDA- Program Manager